PARENTAL LABOR MIGRATION AND ADOLESCENTS' TRANSITION TO HIGH SCHOOL IN RURAL CHINA

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NATIONAL UNIVERSITY OF SINGAPORE

2014

PARENTAL LABOR MIGRATION AND ADOLESCENTS' TRANSITION TO HIGH SCHOOL IN RURAL CHINA

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(B.A., M.A.)

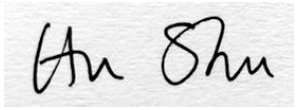
A THESIS SUBMITTED

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
DEPARTMENT OF SOCIOLOGY
NATIONAL UNIVERSITY OF SINGAPORE

2014

DECLARATION

I hereby declare that this thesis is my original work and it has been written by me in its entirety. I have duly acknowledged all the sources of information which have been used in the thesis. This thesis has also not been submitted for any degree in any university previously.

Signature: 

HU Shu

18 November 2014

Acknowledgements

I wish to thank all the adolescents, parents, grandparents, and teachers of Tongcheng who participated in this research for taking the time to share their stories with me. I hope I have done them justice in this thesis.

To Professor Wei-jun Jean Yeung, my supervisor, I owe a unique debt of gratitude for her continuous guidance, support, and encouragement at each phase of my PhD journey. She has introduced me to the fascinating world of family change and social stratification. Over the past several years, I have grown much as a researcher under her close mentoring.

I am deeply indebted to other committee members, Professor Gavin Jones, and Dr. Qiushi Feng, for their insightful and stimulating comments that helped improve this dissertation substantially.

Special gratitude goes to Dr. Juyeon Kim, Dr. Joonmo Son, Dr. Jiwook Jung, Dr. Vincent Chua, Dr. Emily Chua, Dr. Haibin Li, Dr. Adam Cheung, and Professor Beng Huat Chua for their valuable comments.

I would like to thank the Faculty of Arts and Social Sciences for the fieldwork grant and Asia Research Institute for the financial support for my dissertation writing in the past few months. I thank Ms. K.S. Raja for her kindness, patience, and wonderful administrative assistance.

My friends in graduate school, Bubbles, Ge Yun, Minhye, Amritorupa, Ambika, Xiaorong, Achala, Shelley, Yang Yi, Liu Xi, Lavanya, Aisyah, Ri An, Qiongyuan, Zhengyi, Minghua, Hui Hsien, Wei Dian, Dina, and Kathryn have made my journey a memorable one.

I especially thank Huang Xi, Roop, Minhye, Xiaorong, Dr. Juyeon Kim and Dr. Kay Mohlman for thoroughly reading and commenting on parts of the manuscript. I thank Mr. Woo Weng Leong, Ms. Roma Circar, and Ms. Kim Greenwell for their prompt editing assistance.

I would also like to thank the ladies at 清香馆, the Taiwanese restaurant near the Kent Ridge Ter bus stop, for feeding me on weekends.

I owe this dissertation to my father and mother, who are schoolteachers, for being the best fieldwork assistants and parents that I could ever ask for. Lastly, thanks to Yunfeng, my soon-to-be husband, for his critical comments, encouragement, understanding, support, and patience all along.

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Abstract

Due to China's long-standing rural-urban divide and institutional discrimination, according to All China Women's Federation, in 2010, about 61 million rural children grow up in the absence of parents who have migrated for work. This study investigates how parental migration influences adolescents' transitioning from middle to high school, a crucial step for rural adolescents that can greatly influence their life chances. I used both quantitative and qualitative data collected in a migrant-sending county located in central China.

The data reveal a complex relationship between parental migration and children's educational wellbeing. On one hand, parental migration increases children's educational wellbeing by affording parents an opportunity to stress the importance of education to their children. On the other hand, parental migration also decreases children's educational wellbeing by increasing the odds of parental divorce. When only the mother or both parents migrate, there is a higher likelihood of a parental divorce, which significantly increases risks of discontinuing schooling and transitioning to vocational high school relative to attending academic high school. On balance, because the parental divorce effects are greater than the social remittances effects, there is an overall negative effect of parental migration on children's educational wellbeing. In contrast to the conventional explanations of economic resources, psychological health, caregiver involvement, this thesis emphasizes the significant role of marital instability in the link between parental migration and children's educational wellbeing.

The results also suggest that son preference has declined, though not yet disappeared, in rural China. The gender of the child is not associated with the odds of parental divorce or the type of parental migration. Parental labor migration does not

affect boys and girls differently. However, compared to boys, girls appear to have lower likelihood of leaving school but higher likelihood of going to vocational high school relative to attending academic high school. The implications of the lack of gender differences and the remaining gender differences are discussed.

In this research context, school has served as a care center for adolescents and seems to matter more than all family factors except parental divorce in their educational outcomes. The substantial school or neighborhood effects suggest that investigations into parental labor migration and children's wellbeing should move beyond the family unit to also consider the broader context such as school, education system, economy, and culture.

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Chapter 1 Introduction

I feel very close to them [her migrant parents], only that we see each other infrequently. Every year [I] spend about a week with them, during Chinese New Year. [We] talk over the phone once a week. Every time [we] talk for about a few minutes. It feels like there is not much to be said, but at the same time we really want to hear each other's voice.

--Left-behind girl

I simply hope he [his left-behind child] studies hard…. In such a society, [you] have to get schooling. If [you] don't have schooling, no one wants you even for migrant work.

--Migrant father

I just feel that rural children are pitiful, teachers are also pitiful, and students are also pitiful. The best students are enrolled [in better schools in the county town]. Teachers see no hope. Once teachers see no hope, it affects the students. The students may not know about it, but the teachers are aware. But no one can change this reality.

--Rural teacher

1.1 Study Aims and Significance

Over recent decades, labor migration has grown in scale, complexity, and impact both within and beyond country boundaries, as people move in search of better economic and social opportunities. Governments and international organizations praise labor migration for its enormous potential for economic development and poverty alleviation. Growing labor migration has also been rapidly and profoundly transforming family structure and life in many migrant-sending places around the world.

Due to institutional barriers to equal citizenship, many migrants and their family members including children have restricted access to public education and other social services in destination societies. While destinations provide better economic opportunities, origin societies often remain the basis of social support and security upon which migrants can fall back (Fan and Wang 2008). Also, living

expenses in origin places are generally much lower than in destination cities. Therefore, in order to make the best out of the opportunities and constraints in both destination and origin areas, migrant parents often leave children behind in their home villages. These children then grow up with little parental physical presence.

When researchers examine this particular aspect of labor migration, they often reveal that parental migration entails complex socioeconomic and cultural processes that can potentially have a profound impact on the children who remain behind (Arias 2013; Kandel and Kao 2001; Parreñas 2005; Schmalzbauer 2004). This research aims to contribute to our knowledge about the social consequences of labor migration by investigating how parents' labor migration affects left-behind children's educational wellbeing. I study this phenomenon in the specific context of China, where, as a result of the country's rapid economic transformation, the largest human movement in history is taking place.

Specifically, this research examines the impact of parental labor migration on left-behind adolescents transitioning from middle school to high school in rural China. One of the primary reasons for parents' labor migration is to provide better educational opportunities for their children. Compulsory education in China covers only primary and middle school and admission to high school and then college is competitive. Transitioning to high school is a crucial stage for rural adolescents as it has long-term consequences for their final educational attainment and lifelong economic prospects. The following questions guide this research: To what extent does parental labor migration affect adolescents' educational outcomes? And how does parental labor migration affect adolescents' specific transition from middle school to high school?

1.2 Internal Migration, the Household Registration System, and Left-behind Children in China

The household registration system or Hukou system (hu ji zhi du, "户籍制度") is an integral part of the story of China's great internal labor migration and social transformation. The Hukou system is the most prominent mechanism of social stratification in China. All persons born prior to 1998 inherit their Hukou status from their mother[1] and the channels through which one can change Hukou from rural to urban are highly selective. The Hukou system is bound together with the social welfare system, the public services system, and the land system. Without local urban Hukou, migrant workers have restricted access to public health care, subsidized housing, education, and other services enjoyed by their urban counterparts.

"Peasant workers" (nong min gong, "农民工") is the term often used in China to refer to rural-to-urban migrants who have changed their locations of living and working with no corresponding change to Hukou registration. They are considered not legitimate residents, but rather, outsiders of the urban cities in which they may have lived and worked for years and even raised children. They are expected to return to their rural homes eventually and many of them, especially the older generations, share this expectation.

As of 2012, the number of people from rural China who work and live outside their registered townships for at least six months reached 163 million (NBS 2013), almost doubling from 84 million in 2001 (World Bank 2009:96). Regional disparities sustained by modern China's development strategies underlie the spatial patterns of internal migration. The majority (65%) of total migrant workers move to eastern

[1] Since July 1998, newborn baby can inherit Hukou status either from father or mother, according to policies proposed by the Ministry of Public Security and approved by the State Council. See: http://www.people.com.cn/item/flfgk/gwyfg/1998/112102199802.html, accessed on September 19, 2013

Chinese provinces and cities, mainly Guangdong, Zhejiang, Jiangsu, Shandong, Hebei, Fujian, Shanghai, and Beijing. Top migrant-sending provinces are Guangdong, Henan, Sichuan, Shandong, Jiangsu, Zhejiang, Anhui, Hunan, Hebei, Hubei and Guangxi. Four on this list (Guangdong, Shandong, Jiangsu and Zhejiang) are from an eastern region characterized by prominent intra-provincial migration, while the rest are in central and western regions where inter-provincial migration is the dominant form.[2]

Only one in five Chinese migrant workers migrate with their family members, while the rest leave their family members behind (NBS 2013). Based on the 2010 census, 61 million rural children are left behind as one or two of their parents migrate to urban areas to work. The left-behind children are concentrated in top migrant-sending provinces, such as Sichuan, Henan, Anhui, Hunan and Hubei in western and central China, and Guangdong and Jiangsu in eastern China. Nearly half of the total left-behind children are in absence of both parents; the majority of these children left behind by both parents are cared for by grandparents only (ACWF 2013).

Many migrant workers have been working in the cities for a number of years and they go home usually once a year during the Spring Festival. According to the 2005 China Urban Labor Survey, nearly half of the migrant population have stayed in their current place of work for more than five years and 20% have stayed for more than 10 years (World Bank 2009:41). As migrant parents become more established, self-funded privately run schools become more available, and local governments' public school policies become less discriminative in destination areas, the number of migrant children has increased dramatically. Around 28.8 million rural children

[2] The three economic belts consist of eastern (Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Hainan), central (Shanxi, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan) and western (Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Xizang, Shaanxi, Gansu, Qinghai, Ningxia, Xinjiang), adopted by the Seventh Five Year Plan (1986-1990) and revised during the Western Development Program in 2000s.

migrate together with their parents to more developed areas of China, based on the 2010 census (ACWF 2013). Note that the educational status of migrant children are likely to vary as levels of development, concentration of migrants, and local migration controls and education financing policies and practices pertaining to migrant children differ across different places (Chen and Feng 2012; Lu 2007).

I focus on left-behind children in this research not because they constitute a numerically larger group than migrant children (though they do), but because they, spreading across vast rural areas, are less visible to researchers, policymakers and NGOs. More research is warranted to understand how left-behind children are doing. Such studies will be informative in creating measures and policies that will harness the benefits of labor migration, while simultaneously minimizing the social costs of the process.

1.3 Parental Migration and Children's Educational Wellbeing

Parental migration affects children's lives in many ways. This study focuses on children's educational outcomes. The education attainment of Chinese people has improved substantially in recent decades, but the urban-rural gap has enlarged at the same time (Wu 2010; Yao et al. 2010). Transitioning to high school remains a formidable bottleneck especially for rural youth if they wish to pursue tertiary education (Hannum et al. 2011; Yeung 2013). As researchers documented an increasing returns on schooling in the market economy era (Zhang et al. 2005) and higher education continues to channel a small group of people from rural origin into privileged urban society, urban-rural inequality in education has profound implications for the socio-economic prospects of rural people.

Many rural parents hope to improve educational opportunities for their children through labor out-migration. Existing literature has identified several

mechanisms linking parental migration to children's educational attainment. Researchers have noted the economic benefits of parental labor migration. Studies have found that remittances brought by parental migration ease budget constraint and increase economic resources for investment in children's health and education (Frank 2005; Kanaiaupuni and Donato 1999; Lu and Treiman 2007). The improved financial situation may also reduce the demand for child labor and increase the time that children can thus use for their education.

Migrant parents not only send economic remittance back home but also bring in social remittance (Levitt 1998). Migrant parents' experiences of working in relatively more developed areas and moving back and forth between different work places and their hometown probably change their worldviews, values, and aspirations for themselves and their children. In particular, labor out-migration may heighten parents' awareness of the value of education. Consequently, parents may have high aspirations for their children's educational achievement and a strong commitment to supporting their education. The social remittance of parental migration, in turn, affects children's educational aspirations and values.

However, it is also likely that children of migrant parents tend to see labor migration as an alternative to economic mobility (De Brauw and Giles 2006; Kandel and Kao 2001). The economic independence promised by migrant work and migration networks provided by parents might discourage children from staying in school and pursuing further education. In other words, children of migrants may choose to follow in their parents' footsteps at the expense of pursuing their own schooling.

Other mechanisms are less examined and largely speculative. In addition to financial capital and human capital, family also provides another important resource,

social capital embedded in the relationships among persons, for child development (Coleman 1988). The parental attention, care and supervision children can receive at home have been shown to be significantly associated with their educational wellbeing in the family literature (Carlson and Corcoran 2001; Lareau 2000; Lareau 2003), but are less empirically tested as mediating mechanisms in the contexts of parental migration. The loss of parental attention and supervision due to labor out-migration may lead to poorer academic performance of children. Parental absence may potentially jeopardize parent-child bonding, and children may feel abandoned and perform poorly due to the negative impact on their psychological wellbeing.

Moreover, as suggested by studies of individual migration and marital stability, labor out-migration and spousal separation may lead to increased risk of marital dissolution, as a result of straining marital roles and relationships and changing normative values and social control levels (Frank and Wildsmith 2005; Locke et al. 2014). Western literature has generally found that children of divorced parents fare worse in many aspects of life than their counterparts from intact families. Whether parental labor migration increases the likelihood of parental divorce and in turn generates adverse effects on children's lives is not known in the context of rural China.

Given these simultaneous yet contradictory mechanisms, the question of whether parental migration improves or harms children's educational advancement remains open to debate. By focusing on rural left-behind adolescents' transitioning to high school and employing both quantitative and qualitative data collected specifically for this topic, this study will contribute insights to solving this puzzle.

1.4 An Ecological Perspective on the Lives of Left-behind Adolescents: Migrant Parents, Extended Families, and School

In addition to immediate family, other institutional settings such as extended family, school, peer group, and community all influence the functioning of family and wellbeing of children (Bronfenbrenner 1986). Adolescents are in a stage of gaining independence and autonomy and developing personal identities. The role of non-parent adults and peer groups becomes increasingly important during this stage of adolescent development. In the current study, by looking beyond the nuclear family environment, I aim to deepen our understanding of what parental migration means for children in a broader context.

Migrant parents and left-behind children are constantly negotiating the situation of being separated from each other. The degree of presence or absence of migrant parents is likely determined by, for example, how much remittance migrant parents send home for expenses for the children, how much time and effort they devote to communicating with children after their long work hours, and how often migrant parents visit home and spend time with children. The same children may also experience multiple transitions—from being left behind, to being non-left-behind, to becoming migrant themselves—as their parents return from destinations or restart migrant work or bring their children with them to the cities. How children view their parents' labor migration and their separation from parents also deserves attention, as child rearing is a dynamic bidirectional process.

Extended family members are often involved in caring for children left behind by migrant parents. In fact, intergenerational exchange or, more generally, support of extended kin networks often enables the labor migration of parents in the first place. In addition to tending the family farmland and taking care of the household, many grandparents are raising grandchildren alone in rural China (ACWF 2013).

Sometimes parental migration involves cooperation among multiple households and children may grow up with cousins under care of uncles, aunts, and/or grandparents. The availability and characteristics of caregivers are important to the quantity and quality of care left-behind children will receive.

The school system is highly competitive in China, with students competing via High School Entrance Exam and College Entrance Exam for limited slots at each level. Progression rate is one of the most important criteria in evaluating schools and teachers. Middle schools thus timetable adolescents' everyday lives so thoroughly that schools are de facto functioning as childcare centers on weekdays and even weekends. Schools and teachers closely monitor adolescents' behaviors and activities on a daily basis, albeit with a focus on academic performance. Meanwhile, adolescents intensively socialize with one another as peers in classrooms, canteens, playgrounds, and dormitories. Indeed, one could well ask whether school routine so dominates adolescents' daily lives today that family has become less important for educational outcome.

We know that neighborhood characteristics still matter for adolescents' educational attainment through a number of interrelated mechanisms (Ainsworth 2002). Studies on community disparities in education in developing countries have shown that basic material inputs such as availability of schools and teachers, textbooks, library and lab resources are important in determining children's educational status (Buchmann and Hannum 2001; Hannum 2003; Huisman and Smits 2009). Another related mechanism relevant to this research is that neighborhoods can shape the type of role models available to youth outside the home. In neighborhoods with a higher concentration of educational resources, adolescents are more likely to be exposed to attitudes and behaviors that are beneficial to success in school. In

neighborhoods with greater prevalence of labor out-migration, adolescents may be more inclined to pursue a path other than academic advancement to achieve economic mobility.

This research adopts an ecological perspective that takes into account the micro and macro environments in which children develop. I wish to provide a richer picture of the lives of left-behind children in rural China that includes different perspectives and layers.

1.5 Data and Analysis Method

The data used in this research were collected mainly during my fieldwork in Tongcheng County, Hubei Province of China from September 2012 to June 2013. The exam records and the outcomes of adolescents' transition to high school were obtained two months after the High School Entrance Exam.

I used stratified cluster sampling to recruit the target participants, which include all final-year students from three middle schools and their primary caregivers and teachers. Both questionnaire survey and qualitative interview were used to collect data from left-behind and non-left-behind children, teachers, and caregivers.

The survey asked questions regarding parents' migration history, parenting practices, parent-child relation, children's school life and peer relation, time use and aspirations, psychological wellbeing, teachers' assessment of students, and caregivers' characteristics. Open-ended questions and in-depth interviews collected information about children's experiences and feelings. Data from multiple time points were used to address research questions about mechanisms of parental migration affecting children's educational outcomes.

I used OLS regression, logistic regression, and structural equation modeling to examine the impact of parental migration on adolescents' educational outcomes and

the role of multiple mediating pathways including economic resources and educational investment, psychological wellbeing, caregiver's involvement in study, education value, and parental divorce.

1.6 Structure of Thesis

This dissertation consists of seven chapters. Following this introduction, Chapter 2 discusses the socio-economic and historical contexts for this research. I first describe the Hukou system, focusing on its implications for Chinese internal labor migration, the urban-rural divide, and spatial hierarchy. Then, I discuss education reforms, stratification, and subsequent changes in the direct costs of schooling, the opportunity costs of education associated with labor migration, and the prospects of higher education for rural youth. After discussing the gender and intergenerational norms and values underlying the characteristics of Chinese internal migration, I then describe the specific socio-economic and demographic characteristics of my fieldwork site.

Chapter 3 reviews previous theoretical and empirical research on the association between parental migration and children's educational outcomes. This review builds on both family and child development literature and migration literature, and covers research in both international and internal migration contexts.

Chapter 4 presents the research design developed for this study. I first propose a conceptual framework that delineates the impact of parental migration on children's wellbeing, and formulate hypotheses regarding different pathways. I then deal with issues regarding data collection and the measurements of the independent, dependent, mediating, and control variables. I discuss the limitations of the data and the generalizability of findings.

In Chapter 5, the descriptive analyses chapter, I first present the basic demographic characteristics and socioeconomic background of the sample. I then describe the lives of migrant parents and left-behind adolescents. I highlight the dominant role of school in adolescents' daily lives. Finally, I examine the educational outcomes by parental migration status, gender, and the location of school, and the bivariate associations between parental labor migration and the mediating variables.

Chapter 6 presents and discusses the findings from multivariate analyses on testing research hypotheses and answering research questions. I also use data from qualitative interviews to provide a fuller picture with which we can contextualize the statistical results.

Finally, in Chapter 7, I conclude by reviewing the objective and main findings of the study. I discuss the theoretical implications of the research findings, as well as the research limitations and future research plans.

Chapter 2 Research Contexts

To understand the characteristics of internal labor migration and the implications of parental labor migration for rural adolescents' educational outcome in China, one has to consider its socio-economic and historical contexts. The first section of this chapter introduces the institutional and cultural contexts of parents' labor out-migration. Regional disparities, institutional barriers posed by the Hukou system, gendered division of labor, and intergenerational exchange have all contributed to the massive, circular internal labor migration of China, leaving millions of rural children in the absence of either one parent—more likely the father than the mother—or both parents.

One of the main purposes of parents' labor out-migration is to improve their children's educational opportunities, which have been shaped by the education system and reforms. The second section of this chapter therefore discusses the importance of education in contemporary China, the regional disparities in education resources, the direct costs of secondary education, the prospects of obtaining higher education, and the opportunity costs of forgoing migrant work while pursuing further education. After an illustration of the broad picture of the educational opportunities and constraints that rural parents and children face in contemporary China, this chapter will conclude with a presentation of the specific socio-economic and demographic contexts of the fieldwork setting and a brief summary.

2.1 Institutional and Cultural Contexts of Parental Labor Migration and Left-behind Children

A careful observer will easily discern the substantial disparities across regions all over China. Numerous studies have focused on the dimensions, degrees, trends and causes of regional disparities and the impact on the distributions of migration flow

(Fan 1995; Fan 1997; Fan 2005; Fan 2009b; Groenewold and Chen 2010; Li 1997; Liang and Ma 2004; Yang 1996). People vote with their feet to escape the dismal financial prospects of farming or underemployment in their home areas and prefer to take up employment opportunities in more developed regions. This sounds like a familiar story of migration and urbanization until we start to question why millions of migrant parents leave their children behind.

2.1.1 The Hukou System and Spatial Hierarchy in China

The key to understanding the phenomenon of parental migration and left-behind children lies in the Household Registration (Hukou) system. The Hukou system, a legacy of China's communist era, is a comprehensive and powerful mechanism of resource allocation and social stratification that stands between rural residents, rural migrants, and their urban fellow citizens (Cheng and Selden 1994; Young 2013).

The Hukou status has two basic classifications: Hukou type and residential location (Chan 2009; Chan and Buckingham 2008; Chan and Zhang 1999). In pre-1978 era, the specific Hukou type—agricultural (rural) or non-agricultural (urban)—dictated one's entitlements to rationed food grain, subsidized housing, health infrastructure and medical care, education facilities, and other public goods provided by the state, and it favors urban residents over rural residents. Many of these benefits associated with non-agricultural Hukou have eroded as a result of economic and social reforms over the past few decades. A very recent document issued by the State Council of China (2014) has abolished the distinction between agricultural and non-agricultural Hukou.

The second classification of hukou, residential location, however, largely continues to determine one's eligibility for opportunities and services available at a

specific locality. Hukou conversions from administratively lower-ranking locations to higher-ranking locations have been strictly controlled by the state (State Council 1977). In the 1980s and 1990s, the Central government and some local governments have introduced a number of schemes including "temporary residence certificate" ("暂住证"), Personal Identification card, and "blue-stamp" or "locally valid" Hukou ("蓝印户口"), to accommodate the demand of industrialization on the labor force (Chan and Zhang 1999; Wang 2005). In 2014, the State Council of China (State 2014) proposed to fully open small cities and towns to migrants and their family members, granting local Hukou to those who have a legal stable residence. However, for larger cities, especially the largest ones, entry conditions remain highly selective as far as most ordinary migrant workers are concerned.

The reforms have so far touched only the surface of the institutional bases of the dual-society structure, leaving intact the localized tie between Hukou status and entitlements to social services and welfare. The Hukou system has retained its core of maintaining a spatial hierarchy in China (Chan 2009; Chan and Buckingham 2008). The discriminations that rural Hukou holders still face include access to certain types of employment, to urban social security schemes, to public education, and to mortgage and state-subsidized low-rent housing and so on (Young 2013:89).

If migrant parents want to educate their children in schools in the city, they have three options: send them to private schools; enroll them in public schools; or send them to migrant children's schools that are sponsored by migrants. The first option is usually beyond the means of the majority of migrant workers. To enroll children in public schools, up to late 2000s, migrant parents had to pay placement fees ("借读费") or sponsorship fees ("赞助费"), which were usually several times more than the cost of tuition. For example, according to a 2000 survey on migrant

children's education in Beijing by Chen and Liang (2007), placement fees and sponsorship fees cost about 2,000-6,000 RMB yearly, whereas tuition fees range between 400 and 800 RMB for primary school.

A majority of migrant workers enroll their children in migrant-sponsored schools that are often under-funded and poorly-equipped (Chen and Feng 2012). Migrant children's schools trace their roots to the self-help endeavors of migrant workers and most of them rely mainly on student tuition for operations (Kwong 2004). They do not have a legal status and receive little financial support from either local or central governments.

Since 2008, the central government has issued several directives ordering local governments to take the responsibility of educating migrant children without providing specific funding. However, few local governments are motivated to spend their education budget on migrant children. One notable exception is probably the Shanghai government, which has launched a "Three-year Action Plan for Compulsory Education of Migrant Children (2008–2011)" to build new schools to accommodate the growing needs for education, to facilitate migrant children's enrollment in public schools, and to legalize and subsidize migrant children's schools and so on. By the autumn of 2010, over 70% of migrant children in Shanghai were enrolled in public schools and government-authorized migrant children's schools free of cost.[3]

Another educational barrier that migrant children face in the destination cities is embedded in the Hukou-based system of High School Entrance Exam and College Entrance Exam. One can only take these life-shaping exams in the place of his or her Hukou registration. Moreover, the curriculum and certain tests in the entrance exams differ across provinces, and this further encourages migrant children to return to their

[3] See http://www.shmec.gov.cn/html/article/201009/59352.php, accessed on August 22, 2013

hometown to accustom themselves to the local curriculum and better prepare for the entrance exams.

Responding to a 2012 directive issued by the central government, certain provincial-level and city-level governments promulgated measures to accommodate the needs of migrant children taking entrance exams to progress to a higher level of education.[4] However, even when the new policies apply, migrant workers and children would still need to meet various criteria including a minimum three-year high school attendance, a social security record, an employment contract, and a stable residence and so on.

Perhaps the only institutional advantage rural residents have over urban counterparts is that agricultural Hukou provides access to contracted farmland, which could serve as social security against risks associated with urban employment opportunities for rural migrants (Fan and Wang 2008). As urban China further expands, the value of rural land in relatively developed areas has been increasing. The adopting of urban Hukou would mean losing their land rights; therefore, many migrants are not necessarily willing to change their Hukou status.[5]

Owing to the integration of the Hukou system with entitlements to land, and other social services and welfare, the large-scale Chinese internal migration remains circular and "temporary". Many rural migrant workers remain outsiders in the cities despite their de facto residence over years or even decades; many migrant children remain outsiders even though they may be born and bred in the cities; and many rural children are left behind in their home villages, separated from migrant parents.

[4] See http://edu.sina.com.cn/gaokao/2012-12-30/1958367586.shtml, accessed on August 22, 2013

[5] For example, see http://finance.people.com.cn/n/2014/0815/c1004-25469414.html; and http://www.theguardian.com/world/2014/jul/31/china-reform-hukou-migrant-workers, retrieved October 30, 2014

The continuous existence of the Hukou system has maintained a migrant labor regime in support of the national economic development strategy (Fan 2004). By utilizing the labor power of migrant workers without providing them and their families with education, health care, housing and other social services enjoyed by urban local Hukou holders, production costs are kept at an internationally competitive level, fueling the economic growth of China.

However, the export-oriented labor-intensive development strategy is not without limitations. Economic reasons for promoting free labor mobility and productivity and encouraging domestic consumption are compelling, and these hinge upon further reforms of the Hukou system (Cai 2011; Chan 2009; Chan 2010). As long as the spatial hierarchy buttressed by the Hukou system persists, the rural population and migrant workers will continue to be disadvantaged in economic security and human capital investment.

2.1.2 Gendered Division of Labor

Like in many other migrant-sending societies, labor out-migration of parents in China is laden with gender messages. Overall, fathers are more likely to be migrant workers than mothers, and rural children are more likely to stay behind with mothers than with fathers (ACWF 2013). The age-old inside-outside dichotomy in gender roles defines the woman's place to be inside the family and the man's sphere to be outside ("男主外，女主内"). Not surprisingly, therefore, men make up two-thirds of the migrant worker force in general (NBS 2011b). Moreover, compared with male migrant workers, female migrant workers are mainly channeled into less prestigious and lower-paid jobs such as garment workers, seamstresses and knitters, and domestic workers (Fan 2003; Fan 2004).

When rural women do migrate, their life as migrant workers is short-lived. As their age goes up from 20 to 28, the female percentage of migrant workers drops from nearly 50% to about 30% (NBS 2011b). Despite a slow rising trend in recent decades, the mean age at first marriage remains relatively low for Chinese women (Jones and Yeung 2014). When they reach their twenties, pressure upon them to get married can be immense. Upon marriage, females are expected to stay home taking care of housework, children, aged parents, and farm work, while facilitating the migrant work of the male members of the family. This is illustrated by the greater popularity of mother-remaining migrant families (ACWF 2013; Fan 2003; Yang and Guo 1999).

Gender norms about labor division indicate that the migration and absence of the mother may have different effects on the lives of the children from that of the father. Studies in the context of Philippines, Indonesia, Thailand suggested that children left behind by migrant mothers seem to face greater difficulties and more adjustment problems compared to their counterparts staying with mothers (Asis 2006; Asis et al. 2004; Battistella and Conaco 1998; Bryant 2005). However, when studying China's internal labor migration and left-behind children's lives, researchers haven't paid sufficient attention to the effects of maternal migration.

2.1.3 Intergenerational Exchange and Skipped-generation Family

Another notable characteristic of China's internal labor migration is the prevalence of the skipped-generation family and the role of grandparents in raising the future generation. As in many other migrant-sending developing countries, the emphasis on the collective wellbeing of the family and the social support from extended family members, especially grandparents, have made the labor out-migration of parents possible (Boehm 2008; Fan and Wang 2008; Fan 2008; Parreñas 2001).

In traditional China, long held and widely honored filial piety values obligate children to respect parental wishes, to tend to parental needs, and to provide attentive care and support for elderly parents (Ho 1994). As the saying "raising children (sons) to provide for one's dotage" ("养儿防老") suggests, younger generations are indebted to parents and should pay back for the early care received during childhood by revering and supporting them. This intergenerational contract prioritizes the will and welfare of parents and grandparents over that of younger generations (Croll 2006).

In contemporary China, rapid modernization and urbanization and intensifying interactions with Western values that emphasizes individual autonomy and interests, have led to a decline in the status and power of the older generation, and a rise in the autonomy and independence of the younger generation (Wang 2004). Filial attitudes and practices may have weakened amid dramatic political, social, and economic changes, but reciprocal exchanges and mutual responsibilities continue to play an important role in family life. Both older and younger generations have responded to the state's development strategies and social policies by renegotiating and investing in the intergenerational contract to maximize the benefits of the collective extended family (Croll 2006; Zhang 2004).

On the one hand, the elderly continue to mainly rely on children for old-age support and health care, in the absence of an adequate social welfare system. On the other, the younger generation, in its formative years, receives intensified investment from parents as the costs of raising and educating a child increase. When they become parents themselves, they rely on grandchild care to be able to balance the needs of work and family, or migrate and take up new opportunities in the market economy (Chen et al. 2011; Cong and Silverstein 2011).

When both parents migrate to the city, they often leave children in the care of grandparents. The 2010 census recorded a significant proportion (33%) of rural left-behind children in China living in skipped generation families (ACWF 2013). Additionally, another 24% of rural left-behind children were staying with one remaining parent and grandparents when the other parent migrated. Given the institutional constraints imposed by the Hukou system and other relevant state policies, this intergenerational cooperation and split-household strategy enables the family to take advantage of better-paid jobs in the city while simultaneously holding down the fort at their home village (Fan 2008). However, it should be pointed out that migrant workers and their left-behind family members are shouldering an extremely disproportionate amount of the social and economic costs of the rapid industrialization and economic growth of China.

2.2 Education Stratification in Transitioning China

Many migrant parents, substitute caregivers, and left-behind children, when asked about reasons for labor out-migration of parents, cite educational wellbeing or a better future for children. This main motivation is well justified considering that, in modern society, education leads to prestigious and well-paid jobs and thus a better life in terms of social and economic resources.

Education has traditionally been highly valued in China as it provides access to positions in the state's bureaucracy under the imperial examination system. After the establishment of the full-fledged Hukou system in socialist China, enrollment in higher education became one of the few highly selective channels for rural Hukou holders to upgrade their Hukou status and join the elite minority in the urban welfare state (Cheng and Selden 1994).

Studies have found rising returns on education in urban China since market reform commenced in the late 1970s (Nee 1989; Yang 2005; Zhao and Zhou 2007), though the absolute rates seem to be much lower compared with those of other developing Asian countries (Psacharopoulos 1994). One study, using 14 consecutive annual surveys of urban households in six provinces, shows a dramatic and robust increase in the monthly wage returns on education, from 4.0% in 1988, to 10.2% in 2001, and 11.4% in 2003 (Zhang and Zhao 2007). These rates in the 2000s are more comparable to those latest estimates in other developing countries (Psacharopoulos and Patrinos 2004).

In rural China, Zhao found that education significantly raises access to urban formal employment (Zhao 1997). More recently, the mean hourly wage returns on an additional year of education is estimated to be 6.4% among those with off-farm jobs, 7.8% among migrants, and 11.9% among young migrants aged 35 and under, based on a nearly nationally representative sample obtained in 2000 (De Brauw and Rozelle 2008). More significantly, education promotes the chance of obtaining a sought-after local urban Hukou and thus permanent migration to the city. The importance of education has undoubtedly remained constant, if not increased, over the decades, but the opportunities and constraints that rural people face in availing of it have changed since the onset of the education reforms in the 1980s.

2.2.1 Education Reforms and Regional Gaps

In the post-1978 period, in line with its transition from a central planning economy to a socialist market economy, China has decentralized decision-making powers and financial responsibilities from the central government to provincial and local governments (Tsang 1996; Tsang 2000). The *1985 Decision of Central Committee of CCP on Reforming Education System* and the *1986 Compulsory*

Education Law established the principle that "local governments are responsible for basic education and that different levels of government administer different levels of education". Local governments were encouraged to diversify financial resources for education by collecting education surcharges and broadening non-government resources. The non-government resource pool is an amalgamation of social contributions, tuition and fees, and funds generated by school-run production units.

Over time, the relative contribution from non-government source to education funding has increased, as the central government withdrew its commitment to funding basic education and the resource-poor local governments turned to private pockets for funds. In 1986, government budgeted funds accounted for about 77% of total funding for education, surcharges and levies about 5%, and tuition and fees about 3%. In 1997, the proportion of government budgeted funds decreased to 54%, while the contribution from surcharges and levies increased to 11% and from tuition and fees to 13% (Tsang 2000). The rising costs of education further disadvantage poor residents in less-developed areas.

The financial reform in education has also seen widening regional disparities in funding for schools since both government budgetary sources and non-government out-of-budget sources are closely tied to local economic circumstances (Heckman 2005; Tsang 1996; Tsang 2000; Tsang and Ding 2005). In terms of per-student government budgeted operating funds for education, the Eastern cities and provinces spent about twice as much as the Central and Western provinces (see Table 2.1). The top-spending province spent as much as about 11, 9, 8, 6 and 8 times that of the bottom-spending province in primary, middle, academic high school, vocational high school, and tertiary education respectively in 2005.

Table 2.1 Government Budgeted Operating Funds for Education per Student by Level of School in Year 2005 and Year 2012 (in RMB)

	National average	Eastern region	Central region	Western region	Top-spending province	Bottom-spending province
Year 2005						
Primary	1,327	2,667	1,272	1,346	7,941	744
Middle	1,498	2,961	1,288	1,496	8,422	908
Academic High School	1,959	3,566	1,392	1,976	8,132	1,052
Vocational High School	1,981	3,089	1,637	1,811	6,189	1,059
Tertiary	5,376	6,889	3,285	4,417	17,037	2,206
Year 2012						
Primary	6,129	10,014	5,751	7,046	20,408	3,458
Middle	8,137	13,602	7,634	8,339	28,822	5,403
Academic High School	7,776	13,455	6,643	8,214	31,884	5,275
Vocational High School	7,564	10,818	7,368	8,101	21,701	5,072
Tertiary	16,367	19,016	13,742	16,042	47,624	11,007

Source: Ministry of Education, National Bureau of Statistics and Ministry of Finance, Statistical Report on National Educational Expenditure, 2005, 2012

Responding to the fiscal difficulties of local governments, the financial burdens on individual families, and the regional gaps in educational investment, the central government started a series of reforms shifting the major responsibilities for compulsory education upward to the county governments and increasing the transfer payments from the central to local level since 2005. In 2011, government budgeted spending on education amounted to 70% of education expenditure.[6] The regional gap in per capita government budgeted operating funds for education declined in 2012 compared to 2005 (see Table 2.1). However, the absolute gaps among regions and provinces have increased in the past several years. On top of that, these figures have

[6] Calculated based on data from Ministry of Education, National Bureau of Statistics and Ministry of Finance, "2011 Statistical Report on National Educational Expenditure", at http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s3040/201212/146315.html, accessed on December 2, 2013

not captured education disparities in government spending between rural and urban areas within the same province.

Although educational opportunities have improved for Chinese people as a whole over the past decades, substantial variations in access to post-compulsory education persist across regions. According to the Ministry of Education, in 2013, 91.2% of junior high school graduates moved on to senior high schools nationwide. Based on my calculations using 2013 Education Statistics on the total number of new entrants to academic or vocational senior high schools and the total number of graduates of junior high schools for each provincial unit[7], the provincial-level promotion rates to academic high school range from 42.8% in Yunnan to 64.9% in Tianjin, and the provincial-level promotion rates to vocational high school range from 9.2% in Tibet to 43.2% in Shanghai.

The foregoing has depicted a broad picture of education stratification in China, in which rural parents and children are making their decision on whether to continue schooling after middle school. The subsequent sections in this chapter consider the direct costs of middle and high school education, the chances of obtaining higher education, and the opportunity costs of schooling that rural children currently face.

2.2.2 Direct Costs of Compulsory and Upper Secondary Education

Despite the promulgation of the 1986 Compulsory Education Law, primary and lower secondary education has never been really free until very recently. It was as late as 2006 when a new policy embarked on tuition waivers, the provision of free textbooks for all students, and living expense subsidies for students from poor families at the compulsory education stage. This policy has lightened the load of the direct costs of compulsory education for rural residents. The enrollment rates in

[7] See http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/s8494/index.html, accessed on March 17, 2015

primary schools are almost universal, nationwide, although the very few dropouts are concentrated in disadvantaged areas (Hannum and Wang 2006).

Under China's merit-based education tracking system, if students wish to continue beyond nine years of compulsory education, they have to pass the High School Entrance Examination (See Figure 2.1). Based on their test scores, those who have passed the exam are enrolled into two general categories of high school: academic and vocational/technical.

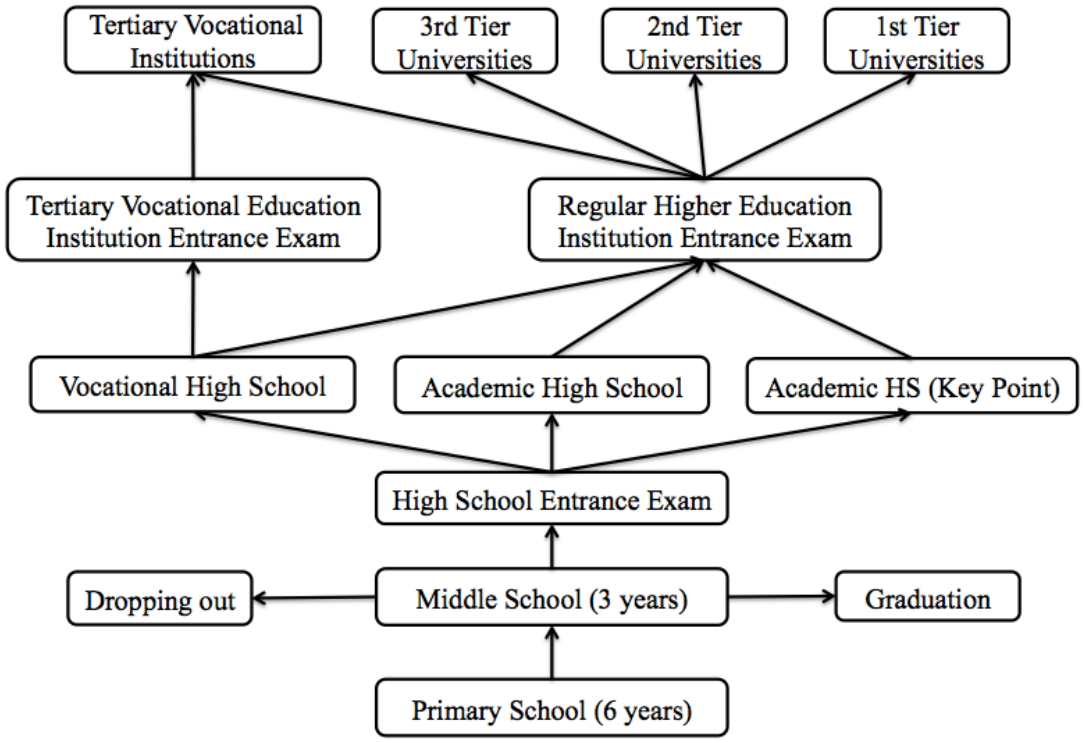

Figure 2.1 China's School System

Within academic high schools, key-point or model high schools receive extra government funding, attract the best teachers and enroll students with the highest entrance examination scores (Liang et al. 2013). Ordinary high schools usually try to compete with key-point high schools by dividing students according to ability and assigning their best staff to those in 'keypoint' classes. Ordinary high schools that

perform optimally may be designated key-point schools in the future, while key-point schools that are poorly managed may lose their status.

The key-point school system originated in the 1940s when the Chinese Communist Party tried to formalize and improve the school education in Yan'an, the headquarter of the Chinese Communists at that time, by pooling resources to invest into the best schools (Liang et al. 2013: 218). This system continued to develop in the 1950s and early 1960s, and resurfaced in the 1980s after being abolished during the Cultural Revolution. Since 1990s there have been increasing calls for reforms abolishing the key-point school system, which has persisted under different names such as "model school", "star school", "experiment school" and "Olympic school"(Liang et al. 2013: 221).

Key-point schools exist hierarchically at the national, provincial, prefectural and county levels. The key-point schools organized at a higher administrative level serve larger geographical areas and claim greater status and resources. Only a small proportion of students are able to attend key-point high schools. Amongst all schools in both the academic and non-academic streams, key-point high schools offer students the greatest chance of obtaining a seat in a good university. A study based on information from Beijing and Suzhou University student registration cards over several decades reveals that most students in Beijing University and Suzhou University come from provincial key-point schools and other lower level key-point schools (Liang et al. 2013).

Competition for a seat in academic high schools and especially key-point high schools is stiff. Rural students are at a disadvantage from the very beginning because of the lower quality of underfunded primary and lower secondary education provided to them, relative to what urban students enjoy in the cities. Key-point high schools are

located in cities and admit only a limited number of students from outside the city area under the same jurisdiction, which again suggests a greater chance of entrance for urban students than rural students.

In the event of an insufficiently high score in the entrance exam, a student can still enroll in a key-point high school or ordinary high school by paying a substantial amount of "school-selection" fee, besides the normal tuition. This type of admission is usually restricted to less than 20% of the total planned new intake,[8] and it clearly favors students from affluent family backgrounds.

Even if rural children are not discouraged by the great pressures of studying extremely hard to prepare for the intensely competitive high school entrance examination, their families will, in most cases, find high school education expensive, especially for those less well-off. Liu et al. (2009a) have shown that only 7 out of 41 countries charge tuition in rural public high schools and China's tuition fee is the highest. For three years of high school tuition, rural people in China have to pay 82% of their average annual net per capita income (Liu et al. 2009a).

It is worth noting that the calculation of direct costs of high school education in China, in Liu et al.'s research, is based on a survey of rural high school students in Shaanxi, a less developed province, and that tuition costs vary across different areas of China. For example, tuition for an ordinary high school is 1,800 RMB, for a county-level or district-level key-point high school 2,400 RMB, and for a city-level key-point high school in Shanghai 3,000 RMB, ranging from 10.3% to 17.2% of per capita net income for Shanghai rural residents in 2012.[9] In Hubei Province, the annual

[8] See http://news.xinhuanet.com/edu/2013-07/12/c_124995680.htm, accessed on December 3, 2013

[9] See http://www.chneic.sh.cn/res_base/syxh_cn_www/upload/article/file/2013_3/9_13/0gdohliyoucj.pdf, accessed on December 4, 2013

tuition for ordinary high school is 940 RMB and for provincial and prefectural key-point high schools 1,325 RMB, ranging from 11.9% to 16.8% of per capita net income for Hubei rural residents in 2012.[10]

Many high schools are boarding schools or at least provide boarding facilities, and are located in county cities or bigger cities, which are typically far away from where rural children live. In addition to tuition, costs of textbooks and other miscellaneous fees, rural children often have to pay for room and board. Not surprisingly, the Hukou status has an impact on a child's chance of transitioning to academic high school and consequentially college (Connelly and Zheng 2003; Liu et al. 2009a; Wu 2010; Yeung 2013).

Non-academic high schools require much lower examination scores for admission, and some technical schools ask only for a lower secondary school diploma. For example, in 2013, for the High School Entrance Exam takers of Tongcheng County in Hubei, the cutoff marks was 561 for admission to provincial key-point high school, and 320 for admission to county-level academic high schools. However, entry to vocational high school had no such requirement.

In the past four years, the Ministries of Finance, Education, Human Resource and Social Security, issued a series of directives, establishing tuition waiver and a stipend program for non-academic high school students in China.[11] Full tuition waiver is available for all rural students, and for those urban students who enroll in agriculture-related subjects or who belong to financially constrained families.

[10] See http://www.wuchang.gov.cn/sysf/1173626.jhtml, accessed on December 4, 2013

[11] See http://jkw.mof.gov.cn/zhengwuxinxi/zhengcefabu/200912/t20091216_246954.html, http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_1779/201102/115345.html, http://www.gov.cn/gongbao/content/2013/content_2332779.htm, http://jkw.mof.gov.cn/zhengwuxinxi/zhengcefabu/201306/t20130614_917961.html, accessed on December 4, 2013

The new policy also provides stipends for Year-One and Year-Two students enrolled in agriculture-related subjects and for students who are enrolled in other subjects, but who are from financially constrained families. The central government is sharing the financial responsibilities of the new program with the local government in different proportions, favoring the western regions over the central and eastern regions. How much effect these new policies will have upon the choice that rural students will be able to exercise over attaining a vocational high school education remains to be seen.

2.2.3 Prospects of Higher Education for Rural Adolescents

Since the late 1990s, Chinese higher education has also witnessed further decentralization and diversification of its management and financing system (Mok 1997; Tsang 2000; Yao et al. 2010). Institutions of higher education are stratified into three broad categories: key-point public universities funded by the central government, other public universities financed by local governments at the provincial or municipal levels, and private universities with no government funds (Yao et al. 2010). Tuition and fees charged to all students become an increasingly important source for higher education funding. Meanwhile, as part of an economic stimulus package amid the Asian Financial Crisis, the Chinese government has launched a higher education expansion program. These reforms have fundamentally influenced the access of different groups of people to higher education (Yao et al. 2010; Yeung 2013).

After the initiation of the expansion policy, college enrollment has grown from 1.6 million in 1999 to 6.9 million in 2012 (MOE 2000; MOE 2013). However, the expanding opportunities of tertiary education are distributed disproportionately among different groups of populations. The chance of getting into one particular college depends on not only college entrance examination scores, but also the Hukou

status. The Hukou status is not only related to the eligibility to take the college entrance examination at a specific location, but it is also associated with the applicable college enrollment quota. Almost all elite universities are located in Beijing, Shanghai, and other provincial capital cities, and admit a disproportionate number of local Hukou students, even though they receive a substantial amount of funding from the central government in addition to local financial investment.

To secure admission to a particular university in a particular city, students registered in other places, or from different provinces, have to score considerably higher than their competing peers, local Hukou students. For example, 178 students in Beijing, as compared to 6,539 students in Hubei, are competing for a single slot in Beijing University, based on the 2013 enrollment quota and the number of students who have applied for taking the entrance exam.[12] The chance of getting into Beijing University for Beijing students is about 36.7 times larger than that for Hubei students. The same logic applies to other less prestigious universities, which are exclusively supported by the local governments. Rural children, after striving for high school education, still face institutional discriminations on the road to quality tertiary education (Jacob 2006; Wang 2011; Yao et al. 2010; Yeung 2013).

Even if rural students successfully gain admission into university, their families will have to find ways to cope with the soaring costs of college education. Tuition fees vary by location and type of university, and the field of study. For most fields of study, apart from medicine, arts, and design, Tier-One public universities charge about 5,000 RMB per year for tuition and 1,000 RMB per year for

[12] For Beijing University's enrollment quota see http://www.gotopku.cn/data/detail.php?id=5220; for number of students applied for taking the college entrance exam see http://gaokao.eol.cn/zui_xin_dong_tai_2933/20130503/t20130503_938148.shtml, http://gaokao.eol.cn/dongtai_5640/20130508/t20130508_940175.shtml, accessed on December 4, 2013

accommodation in student dormitories.[13] Assuming a monthly allowance of 800 RMB for a college student and adding living costs to tuition and accommodation fees, the total cost of one year of college amounts to 15,600 RMB—which is about 64% of the per capita disposable income of urban residents and nearly twice more than the per capita net income of rural residents as of year 2012.[14]

While minimum admission scores for Tier-Two and Tier-Three colleges are considerably lower than those for Tier-One colleges, the former, being less subsidized by the government or mostly independent, usually charge drastically higher tuition than the latter. Students in Tier-Two and Tier-Three colleges are also less likely to access any form of state scholarship or financial aid, compared with their fortunate counterparts in more prestigious colleges.

The rapid higher college expansion also gives rise to an increasing graduate unemployment rate,[15] partly due to a mismatch between the requirements and conditions of jobs and the skills and expectations of the young graduates (Zhao and Huang 2010). In a grim job market, stable, prestigious state jobs or positions in state-owned enterprises often favor those with local urban Hukou and degrees from prestigious universities. If one is not able to secure a local urban job, his or her Hukou will be transferred back to the original location upon graduation. Tertiary education no longer guarantees upward social mobility.

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[13] See http://edu.people.com.cn/GB/4590244.html, http://kaoshi.edu.sina.com.cn/collegedb/collegeinfolist.php?_action=t&listtype=fee, accessed on December 4, 2013

[14] Source for per capita disposable income of urban residents and per capita net income of rural residents: http://www.stats.gov.cn/tjgb%20/ndtjgb/qgndtjgb/t20130221_402874525.htm, accessed on December 4, 2013

[15] See http://www.forbes.com/sites/gordonchang/2013/05/26/college-grads-are-jobless-in-chinas-high-growth-economy/; http://online.wsj.com/news/articles/SB10001424127887324678604578340530200654140; http://world.time.com/2013/07/04/in-china-higher-education-brings-few-guarantees/; accessed on December 5, 2013

On the one hand, the Hukou-based college enrollment quota system has placed rural adolescents at a disadvantage. Rural adolescents have lower chance of entering into a Tier-One university than their urban counterparts. On the other, the lower financial costs and better long-term economic prospects of earning a degree from the Tier-One colleges than from less prestigious colleges promise higher returns on investment in education. For rural adolescents who have fewer family economic resources to spare, the stakes are high should they fail to secure a place in a good college against the odds.

2.2.4 Migration as an Alternative to Economic Mobility

Though returns on education are on the rise in both urban and rural China, different groups of people are facing varying sets of hurdles in the form of direct costs, quality, and opportunities of basic education, upper secondary education, and tertiary education. Additionally, as prevalent and transforming as rural-to-urban migration is in China, continuing with schooling is at the same time forfeiting years of income that migrant work may generate. For those households with financial constraints, the high opportunity cost of migrant labor income may discourage them from investing in their children's education. Potential earnings and economic independence provided by migrant work may encourage rural youth to leave school early (De Brauw and Giles 2006).

2.3 Fieldwork Setting

This section attempts to demonstrate that the fieldwork site, Tongcheng County of Hubei Province, chosen for this study, is a valuable setting for studying parental labor migration. It shares certain commonalities with many other migrant sending communities; therefore, the findings gleaned will be pertinent to other similar

contexts across China. There are also some unique aspects that make it theoretically useful as a research site.

This section also points out that on the one hand, education attainment has been improving for the general population of Tongcheng, as for people from elsewhere in China; and on the other hand that there are gender gaps in education attainment and evidence for persisting son preference.

2.3.1 Selection of Fieldwork Site

China, with the largest population in the world, is a geographically vast and socio-economically diverse country. Against this backdrop, this research does not intend to generalize the findings that it generates and ascribe it to the entire populace. For the purpose of this study and the availability of research resources confined to a suitably representative area, I chose Hubei, a province located in the central economic belt of China, as my fieldwork setting (see Figure 2.2).

Figure 2.2 The Location of Hubei Province

According to the 2010 census, Hubei has a resident population of 57.2 million, making it the ninth most populous province in the country, following Guangdong, Shandong, Henan, Sichuan, Jiangsu, Hebei, Hunan, and Anhui (NBS 2011a). Hubei has a slightly lower GDP per capita than the nation.[16] For the greater part of the past three decades, Hubei has also displayed a lower urbanization level when compared to the nation, as is highlighted by the proportion of urban population to the total population.[17] The absolute gap in the income level of urban households between Hubei and the national average has been increasing over time. Hubei had a per capita disposable income of 4,029 RMB in 1995 and 20,840 RMB in 2012; a decline from 94% to 85% of the national averages of 4,283 RMB and 24,565 RMB respectively.

Given the regional divide in off-farm employment opportunities and income in the country, unsurprisingly, Hubei is one of the largest providers of interprovincial labor migrants in China, led by Sichuan, Hunan, Anhui, Jiangxi and Henan, based on the 2000 Census (Fan 2008). Twelve years later, Hubei remains on the list of top ten provinces in terms of the number of migrant workers sent to other townships within the same provincial-level jurisdictional unit or to the other provinces, municipalities, and autonomous areas (NBS 2013). Considering that four provinces on the list are from the eastern coastal zone and dominated by within-province migration, Hubei ranks even higher as a migrant-sending province.

The out-migration of rural residents probably helped Hubei to perform better in raising its rural income. Hubei has narrowed the gap between its rural income and the national average both in relative and absolute terms: the per capita net income of

[16] China Bureau of Statistics, http://data.stats.gov.cn/workspace/index?m=hgnd, retrieved on December 9, 2013

[17] Hubei Provincial Bureau of Statistics, Hubei Statistical Yearbook 2010 & 2011, http://www.stats-hb.gov.cn/upload/yearbook/index.htm; http://www.stats-hb.gov.cn/upload/tjnj/2011Book.html (accessed on June 26, 2012)

rural households in Hubei was 1,511 RMB in 1995 and 7,852 RMB in 2012, about 96% and 99% of the national averages respectively.[18]

Not only is Hubei economically average in China, it is also fairly largely affected by internal migration. The percentage of rural children who are left behind in Hubei has exceeded 40% (ACWF 2013). Being a middling province in China socially and economically, Hubei has the potential to deduce illustrative insights into the influence of parental migration upon left-behind children.

My target study population was final-year rural students in middle schools, as I wished to examine their transition to high school or migrant work after or even before they finished their compulsory education, constrained as I was by the time limit imposed by this doctoral thesis research. Gaining access to middle schools was crucial to this study as final-year students spend most of their time on campus studying and preparing for high school entrance exams. With an eye on these factors and considerations I selected Tongcheng County as my field site, since I was readily able to get permission from gatekeepers including school principals, grade directors, and form teachers, with the help and social connections of my parents, who are secondary school teachers.

Tongcheng County is a valuable setting with a high percentage of left-behind adolescents as required by this research. In 2009, Tongcheng was the 22nd most populous county among 80 counties, districts, or county-level cities in Hubei. About 73% of its residents lived in rural areas and less than one-third were employed in primary industry. When measured by per capita GDP, per capita disposable income of urban residents, and per capita net income of rural residents, Tongcheng was

[18] National Bureau of Statistics, China Statistical Yearbook 1996, 2001, 2011; National Bureau of Statistics, http://data.stats.gov.cn/workspace/index?m=hgnd, retrieved on December 9, 2013

economically performing within the middle range in Hubei (See Table 2.2). As these basic economic and demographic profiles suggest, Hubei is not at either of the extremes in China, and neither is Tongcheng in Hubei. Both of them are just below the average compared to the other same-level administrative units.

Table 2.2 Selected Demographic and Economic Indicators of Tongcheng County in Hubei in both Absolute Value and Relative Ranking, 2009

	Minimum	Tongcheng	Ranking of Tongcheng	Maximum
Resident (1,000 persons)	129	402.8	22	1371.3
Percentage of rural resident	39.6%	73.3%	49	91.9%
Percentage employed in primary industry	16.2%	27.2%	25	59.7%
Per capita GDP (RMB)	6,188	11,971	35	37,355
Per capita disposable income of urban residents (RMB)	3,913	10,822	42	13,857
Per capita net income of rural residents (RMB)	2,790	4,809	34	7,265

Note: Data available for 80 counties, districts or county-level cities of Hubei Province
Source: 2010 Hubei Statistical Yearbook

Tongcheng County is under the jurisdiction of Xianning, a prefecture-level division in southeastern Hubei consisting of four counties, one county-level city and one district. Tongcheng is about 111 kilometers away from the prefectural city of Xianning and 212 kilometers away from Wuhan city, the provincial capital of Hubei, 1,130 kilometers away from Guangzhou to the south, 1,300 kilometers away from Shanghai to the east and 1,530 kilometers away from Beijing to the north (See Figure 2.3). The nearest high-speed train station is located in Yueyang City, Hunan, about 85 kilometers away. There are frequent buses going to these aforementioned transportation hubs or industrial centers daily from Tongcheng County. Convenient transportation facilitates labor out-migration from this area.

Figure 2.3 Location of Tongcheng County, Hubei Province

According to information derived from the Statistical Bureau of Xianning, Xianning had a total of 499 thousand rural migrant workers and 312 thousand of them were working outside Hubei in 2010.[19] In other words, about 20% of Xianning's permanent residents were doing migrant work and about 63% of those migrant workers moved to other provinces. Tongcheng has a similar proportion of residents (19.6%) working as migrant workers (See Table 2.3).

About 82% of the Tongcheng residents are registered as agricultural Hukou holders. The percentage of rural labor force employed in the primary industry has

[19] See Statistical Bureau of Xianning, 2012, Statistical Communiqué of Xianning on the 2010 National Economic and Social Development (2011 nian xianning shi guo min jing ji he she hui fa zhan tong ji gong bao), http://www.xn.stats-hb.gov.cn/ShowInfo.Asp?ID=5,135,78623.28, accessed on June 27, 2012

been declining from 44% in 2005 to 37% in 2010, while the percentage of those working in the industrial sector has been on the rise from 22% to 32% respectively. The change in employment structure is partly due to labor out-migration that is often involved with non-agricultural jobs in urban areas. Out-migration workers comprised almost half of employment of agricultural Hukou holders in 2010, about 10% higher than 2005. The rising rate of migration has undoubtedly led to substantial improvement in net income for rural residents.

Table 2.3 Employment, Migration and Income of Tongcheng Residents, 2005–2012

	2005	2010	2011	2012
Total Population (10,000 persons)	46.18	49.06	49.98	50.39
Agricultural-Hukou Population (10,000 persons)			40.64	41.18
Rural residents employed (10,000 persons)	16.81	18.98		
% in primary industry	44.14	36.9		
% in secondary industry	21.71	31.5		
% in tertiary industry	34.1	31.6		
Rural migrant workers (persons)	66,274	95,277		98,614
Rural migrant workers (% of total population)	14.35	19.42		19.57
Rural migrant workers (% of agricultural-Hukou population employed)	39.44	50.2		
Per capita net income (rural) (RMB)	2,950	5,538	6,245	7,107

Data Source: 2011 Tongcheng Yearbook; Tongcheng Bureau of Statistics, "2011 Statistical Communiqué of Tongcheng on the National Economic and Social Development" (http://www.stats-hb.gov.cn/wzlm/tjgb/ndtjgb/xns/tcx/17099.htm, retrieved on December 10, 2012), "2012 Statistical Communiqué of Tongcheng on the National Economic and Social Development" (http://www.stats-hb.gov.cn/wzlm/tjgb/ndtjgb/xns/tcx/100260.htm, retrieved on December 10, 2012)

Tongcheng also has a high proportion of left-behind children. One third of the students in a primary school located in the county city were reported to be left-behind children.[20] My pilot study in a middle school and a high school revealed that the

[20] http://www.xnnews.com.cn/jy/jyzx/201206/t20120606_418876.htm, accessed on June 28, 2012

majority of the students have been left-behind children. Findings from research conducted in this locality will be informative and relevant to many other similar contexts across China.

2.3.2 Education in Tongcheng

As elsewhere in China, the illiteracy rate has dropped rapidly for Tongcheng people across generations (See Figure 2.4). About 62% of the eldest birth cohort, who were born in or before 1935, are illiterate, as compared to less than 4 in 1,000 of the youngest birth cohort born between 1981 and 1985. However, the illiteracy rate has been higher for females than for males. Among the senior-most generation, 82% of females are illiterate, compared to less than 41% of males. The illiteracy rate declined fast for both genders in the following birth cohorts, and the gender gap even seemed to be reversed among the youngest birth cohort with an illiteracy rate standing at 0.42% for males as opposed to 0.36% for females.

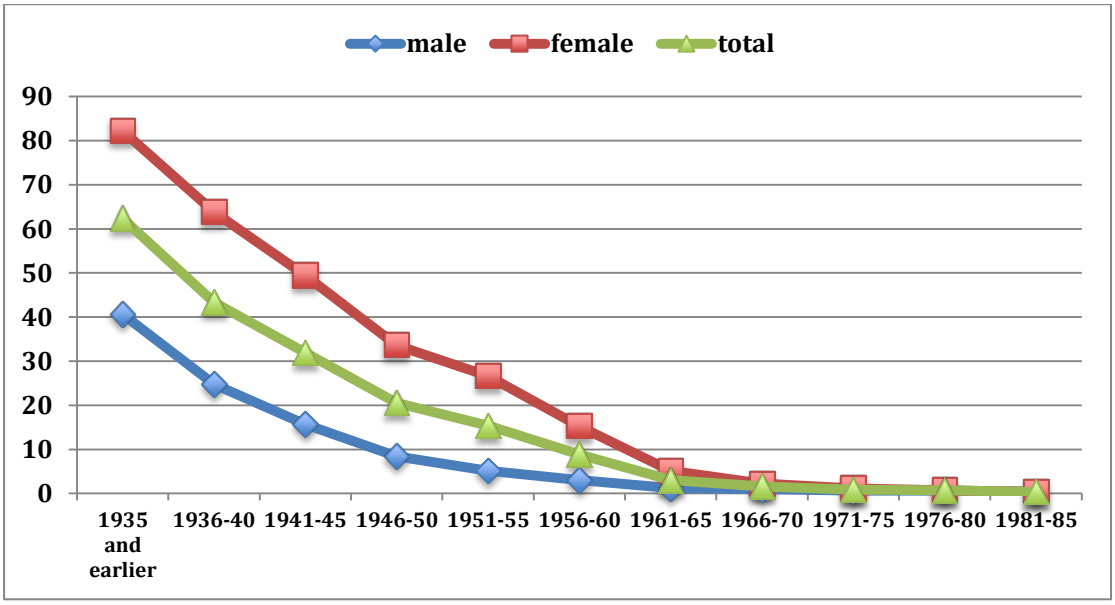

Figure 2.4 Illiteracy Rate by Gender and Birth Cohort of Tongcheng Population Aged 15 and above, 2000 Census

Table 2.4 shows the percentages of males or females from different birth cohorts who obtained highest level of education at less than primary, primary, junior

high, or senior high and above. Across birth cohorts, the proportion of people with less than primary education decreased dramatically for both genders. The proportion of people with primary education first increased before descending, and it started declining earlier for males than for females. Among the youngest cohort born between 1981 and 1985, 15.3% of females in contrast with 9.6% of males had primary education as their highest educational achievement.

The proportion of people with junior high education increased rapidly and steadily for both men and women, but male advantage persisted. The percentage of people with senior high education and above increased for both genders among the elder six cohorts born before 1966. It dropped suddenly for men born between 1966 and 1980, while it first decreased then started to increase again for women in the younger three cohorts. The decline in percentage of people with senior high education or more for birth cohort 1966–1970 might be due to decentralization of rural economy, expansion of off-farm employment, and relaxation of labor migration restrictions in the 1980s when they were of secondary education age.

Table 2.4 Educational Attainment by Birth Cohort and Gender of Tongcheng Population Aged 15 and above (%), 2000 Census

	Less than primary		Primary		Junior High		Senior High and above	
Birth cohort	Male	Female	Male	Female	Male	Female	Male	Female
1936–40	29.0	68.4	54.9	26.5	10.8	3.6	5.2	1.5
1941–45	18.3	53.1	53.9	37.7	19.7	7.0	8.1	2.2
1946–50	9.8	37.0	59.8	52.5	21.4	8.0	8.9	2.5
1951–55	6.2	29.4	56.1	57.0	26.1	9.7	11.7	3.9
1956–60	3.5	17.3	38.7	53.1	36.3	19.0	21.5	10.5
1961–65	1.4	5.7	25.5	43.8	46.6	35.4	26.5	15.1
1966–70	1.2	2.6	28.8	43.1	51.5	43.1	18.5	11.3
1971–75	0.8	1.2	20.1	29.3	59.4	55.0	19.8	14.5
1976–80	0.7	0.8	15.3	19.4	65.2	61.7	18.7	18.1
1981–85	0.5	0.4	9.6	15.3				

Note: Percentages with junior high, senior high and above not showing for birth cohort 1981–85 because they were still of secondary education age by 2000

The gender gap in the educational attainment of the Tongcheng population is not surprising given its tradition of patriarchy, being a Han Chinese-dominant society. Sex ratios at birth were as high as 130 in 2000 and declined slightly to 126 in 2010,[21] suggesting the existence of a strong son preference in the society. Parents are more willing to invest in sons rather than daughters as sons are socially and culturally preferable, and they expect to rely more on sons for old-age support. However, as fertility rates decline, education opportunities improve, and cash-earning capabilities and independence resulting from off-farm jobs and migration empower women, gender discrimination against women is likely to decline. It is evident that gender disparity in education has narrowed across birth cohorts.

In the past decades, the promotion rate for middle school graduates has been on the rise in Tongcheng, and in China as a whole. At the national level, less than 41% of middle school graduates entered high schools in 1990, while 88% of them had the opportunity of receiving three more years of education in 2012.[22] In Tongcheng, 75% of junior secondary graduates in 2006, as compared to 90% in 2012, moved on to the senior secondary level.[23] However, this does not necessarily indicate easy and equal access to educational mobility. The type and level of high school that adolescents go to matter, as entry into key-point academic high schools with the best prospects of academic college admission remains highly competitive and limited for rural adolescents.

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[21] Source for sex ratios at birth in 2000: 2000 Census; source for sex ratios at birth in 2010: 2011 Tongcheng Yearbook

[22] Data from: Ministry of Education, "Promotion Rate of Graduates of School by Levels", http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s7567/201309/156874.html, retrieved December 11, 2013

[23] Data from: Tongcheng Bureau of Statistics, Statistical Report on National Economic and Social Development in Tongcheng 2006, 2012, http://www.stats-hb.gov.cn/wzlm/tjgb/ndtjgb/xns/tcx/17510.htm; http://www.stats-hb.gov.cn/wzlm/tjgb/ndtjgb/xns/tcx/100260.htm, retrieved December 11, 2013

2.4 Concluding Remarks

Economic transitions and institutional reforms in the Household Registration System, finance structure and education system in China have profoundly altered the opportunities and constraints in education for its rural residents. Some transformations have lowered the direct costs of basic education for the Chinese people, while some others have worked in the opposite direction. The importance of upper secondary and tertiary education persists or even grows in a more industrialized and modern China, although shadowed by rising graduate unemployment and unequal distribution of educational resources and opportunities.

Rural Chinese are probably enjoying the most mobile time ever, while they simultaneously remain trapped in second-class citizen status at destination cities in an increasingly diversifying and fragmenting China. Labor migration does indeed provide an alternative to economic mobility, but it competes with rural families' investment in education; and it is the latter which promises social mobility in the long run.

Amid these contradictory structures and changes, this research wishes to shed light on how rural adolescents and families fare and the implications for educational stratification in rural China. Findings from this case study of groups of rural children in Tongcheng County will improve our understanding of the dynamics of interacting social factors and their consequences on the lives of adolescents.

Chapter 3 Literature Review

Most research investigating the influence of family structure on child outcomes has been restricted to contexts where high rates of divorce and non-marital childbearing and cohabitation give rise to single-mother families, remarried stepfamilies, or cohabiting families (Brown 2004; Brown 2006; Cavanagh and Huston 2006; Fomby and Cherlin 2007; Manning and Lamb 2003). Many studies found that children in divorced or single-parent families fared worse than those in two-biological-parent families across a variety of wellbeing indicators such as school engagement, academic performance, behavioral outcome, and emotional health (Amato and Keith 1991; Amato 2000; Carlson and Corcoran 2001; Cherlin et al. 1998; Dawson 1991; MacLanahan and Sandefur 1994).

However, these findings do not suggest that family structures other than two-biological-parent families are inherently harmful to child development, although the number of family disruptions and transitions does play a part (Raley and Wildsmith 2004). Family structures are often associated with both quantity, and quality, of various family resources. Researchers have identified several major kinds of family resources in relation to children's development, including physical capital, economic/financial resources, social and human capital (Coleman 1988), and cultural capital (Lareau 2003).

Parental absence due to labor out-migration has profound implications for distinct forms of family and parental resources which affect the development and wellbeing of children. In this chapter, I review studies on the impact of parental labor migration on children's educational outcomes, with an inclusion of research in both international and internal migration contexts. Informed by both family structure and

child development literature and migration research, I classify the theoretical discussion on this topic into three major perspectives: 1) the *economic resources mechanism*, 2) the *family structure and parenting perspective*, and 3) the *social remittance pathway*.

I also highlight the influence of a broader sociocultural context on shaping the pattern of association between parental migration and educational outcome, and the significance of peers, teachers, school and neighborhood in adolescents' academic life. I then end this chapter with a discussion of the gaps in the literature and the lessons can be learned from previous research on parental labor migration and children's educational achievement.

3.1 Economic Resources Mechanism

Money matters for child development. A lack of economic resources makes adequate food, shelter, other material goods, stimulating learning materials, and educational investment less affordable, negatively affecting children's nutrition, health, cognitive development, and educational attainment. Limited access to economic resources is an important constraining factor in a family's investment on their child's human capital (Becker and Tomes 1994; Duncan et al. 1998).

Apart from these, an individual's position in society often determines his/her circle of relationships. For instance, low-income families are less likely to reside in rich neighborhoods where quality facilities and positive peer influences that encourage achievement and prosocial behavior of children are more available (Crowder and South 2003). Social stigma tied to poverty further increases risks of psychological and emotional problems for children.

Part of the poorer child outcomes in divorced or single-parent families can be explained by poverty and economic stress (Acock and Kiecolt 1989; Amato and Keith

1991; Carlson and Corcoran 2001; Manning and Lamb 2003), as divorce or single parenthood is typically associated with lower economic status and greater financial stress relative to their married-couple counterparts.

However, the economic disadvantage of these families as compared to intact families is less likely the case when we consider the situation of migrant families vis-à-vis non-migrant families. Studies on internal labor migration in China have revealed that migrant workers and their remaining family members are trying to maximize their economic and social security through flexible household strategies, such as division of labor and collaboration between genders, generations, and households, and circular movements between their places of work and the home community (Fan 2009a; Fan and Wang 2008).

Parental labor out-migration brings in income and releases the financial constraints of the households, and thus may promote the physical and educational well-being of children since additional resources are available for food, health care and education (Frank 2005; Frank and Hummer 2002; Hildebrandt and McKenzie 2005; Lu and Treiman 2007; Morooka and Liang 2009).

There are a number of empirical studies showing positive effects of labor migration and remittance on left-behind children's educational outcomes. For example, based on the 1997 Annual Household Survey in El Salvador, Edwards and Ureta (2003) found a significant impact of remittances on school retention. Receiving a remittance of US$ 100 lowers the hazard of leaving school by 54% for children below the 7th grade, 27% for children beyond the 6th grade in urban areas, and 14% for children at all grade levels in rural areas.

Drawing from the 1995 China 1% Population Sample Survey, Morroka and Liang (2009) also found that emigration of parents from Fujian Province of China

enhanced the likelihood of school enrollment for left-behind children and helped to reduce the gender gap in education, as the overall school enrollment for boys and girls within emigrant households began to converge.

A potential methodological concern in establishing a causal relationship is sample selection. The observed relationship between migration remittances and child outcome might be attributed to the influence of other unobserved variables. Taking advantage of heterogeneous changes in exchange rates during the 1997 Asian financial crisis as a randomly sized economic shock, Yang (2008) found that Philippine households with family members working overseas experiencing more favorable exchange rate shocks raised expenditure on education, kept children in school longer, and took children out of the labor force.

Moreover, the impact of remittances on children of different ages and genders may not always be the same. Controlling for household wealth and using selection correction techniques, Acosta (2006) found that in El Salvador girls (11-17 years old) and young boys (11-14 years old) from remittance recipient households were more likely to be enrolled in school than their counterparts from non-recipient households. However, the positive effect of remittances on school enrollment does not seem to hold for older boys.

Very few studies have tried to explain how economic resource mechanisms functions in the association between parental migration and child outcome. Based on cross-sectional and panel data on black households from South Africa, Lu and Treiman (2007) found that children from remittance recipient households were about twice as likely to be enrolled in school than children from non-remittance households. They also tried to explain how remittances work by further exploring three potential

pathways including increased household educational spending, reduced child labor, and mitigation of the disadvantage of parental absence.

First of all, migrant households receiving remittances spend a significantly higher proportion of household income on educational expenditures than do migrant households receiving no remittances and non-migrant households. Secondly, the likelihood of child employment in migrant households receiving remittances is far lower than in other households. Both parental presence and remittances help to increase the odds of school enrollment, but remittances seem to have greater impact than parental absence. Thirdly, when parents are absent, remittances tend to compensate for the negative effect of parental out-migration relative to non-migrant households.

There are many studies highlighting the role of family economic deprivation and community poverty in a child's education opportunity and attainment in China (Adams and Hannum 2005; Brown and Park 2002; Hannum 2003; Hannum and Wang 2006; Knight et al. 2010; Wu 2011). Relatively fewer studies have explicitly investigated the economic consequences of parental labor migration for children's lives.

Whereas Lu and Treiman (2007) found a greater positive impact of remittances than parental absence with regard to children's educational outcome in South Africa, Wang (2012) found a dominant negative family disruptive effect in rural China. It should be pointed out that in Wang's study family wealth indicators, rather than the direct measure of remittances, were examined. Other researchers who found limited or no negative effect of parental labor migration on children's educational wellbeing often attributed it to the beneficial effects of increased financial resources (Lu 2012; Xu and Xie 2013).

3.2 Family Structure and Parenting Perspective

Nonmaterial family resource such as attention, care, and supervision, is also important to child development (Carlson 2006; Coleman 1988; Lareau 2003; MacLanahan and Sandefur 1994). One important assumption of the family structure and parenting perspective is that the family is the key institution for the socialization of children. In a child's home, parents monitor the child's activities and provide warmth and emotional support, encouragement, and discipline. The absence of one or two parents from home may lead to a decrease in parental attention, help, and supervision for the child. Less investment in socializing children may jeopardize their growth and development.

3.2.1 Parental Absence and Child Psychological Wellbeing

Parent-child separation is found to be harmful to a child's psychological wellbeing (Amato 1991; Dawson 1991). For example, children separated from one parent scored higher on the depressive symptoms scale than those who grew up in continuously intact families (Amato 1991). Emotional problems can affect a child's ability to concentrate, leading to poor academic performance (Fröjd et al. 2008). The same situation may also apply to migrant parents and left-behind children who are usually separated for extended spells of time.

In contexts of transnational migration, lengthy separation of children from parents caused by parental emigration can potentially cause heavy emotional and psychological burden to parents and children, disrupt parent-child bonding, and unfavorably affect children's self-esteem (Bernhard et al. 2009; Dreby 2007; Parreñas 2001; Smith et al. 2004; Suårez- Orozco et al. 2002).

News reports and ethnographic studies in rural China often suggest that left-behind children tend to feel lonely, afraid, abandoned, depressed, and become self-

enclosed and even lose interest in life (Xiang 2007; Ye and Pan 2011). However, the patterns revealed by quantitative studies that include both left-behind and non-left-behind children are mixed. One study, using a survey sample from a rural county in Shandong province, found that left-behind children are more likely to suffer from loneliness than non-left-behind children (Jia and Tian 2010). This is corroborated in another study based on survey data from a larger sample in rural Yunnan province (Su et al. 2013). Moreover, Liu et al. (2009b), using survey data on students in rural Anhui, Chongqing and Guizhou, found that children separated from parents at a younger age, and children left behind by mothers or both parents, displayed more symptoms of anxiety and depression.

Other studies, however, found that left-behind children are no less happy or satisfied with life than their non-left-behind counterparts (Su et al. 2013; Wen and Lin 2012). Furthermore, one study using recent national representative survey data from China Family Panel Studies found no difference in terms of depression and positive self-perception between left-behind children and non-left-behind children (Xu and Xie 2013). However, Xu and Xie's study did not differentiate between the different types of parental migration. Using the same dataset, Ren and Treiman (2013) compared rural non-left-behind children, urban local children, migrant children, children left behind by one parent, and those by both parents, and still found that parent-child separation had little impact on the emotional wellbeing of children.

Researchers have suggested that parent-child communication, better economic status, and coping strategies adopted by parents and children, help to attenuate the adverse impact of parent-child separation on children (Jia and Tian 2010; Su et al. 2013; Xu and Xie 2013).

Psychological wellbeing has been treated as one of the main dependent variables in studies that deal with the consequences of parental labor migration. In this study, I will explore the potential role of psychological wellbeing as a mediating variable between parental migration and educational outcome. In other words, parental absence due to the labor out-migration of parents may have a negative effect on the educational outcomes of their children through reduced psychological wellbeing.

3.2.2 Parental Absence and Reduced Social Capital

The social capital of the family, or the resources embedded in the relations among family members, depends on two factors—the physical presence of adults in the family, and the attention given by the adults to the child (Coleman 1988). In single-parent and divorced families, the absence of one parent tends to reduce the care and supervision that children can receive at home. The remaining parent needs to distribute time between paid work, household labor, and childcare, which limits the time and energy that the remaining parent can spend tending to the child. The lack of social capital within the family could partially explain the disadvantages of children from divorced or single-parent families in educational outcomes (Amato and Keith 1991; Carlson 2006; Carlson and Corcoran 2001; Coleman 1988).

This mechanism has not been empirically tested in migrant families. When one parent migrates, the remaining parent usually faces similar challenges experienced by the custodial parent in divorced or single-parent families. When both parents migrate, the child is usually left to the care of grandparents for whom getting involved in guiding an adolescent's study is even more challenging, considering their seniority, possibly graver physical conditions, and lower levels of education. The decreased help and supervision with study in such cases is potentially negatively

related to a child's academic performance. Long-term absence of parents may demoralize a child in terms of schoolwork. Such children may experience less interest in academics and become less committed to schoolwork.

Data obtained from interviews in rural China show that left-behind children face a lack of tutoring during their parents' absence (Ye and Pan 2011). Grandparents, especially grandmothers, in rural China, who usually take up the role of caregivers seldom have higher education than primary school, making it difficult for them to impart skills and knowledge in tandem with the current system of education.

This pattern has also been substantiated by ethnographic data from Mexico (Dreby 2007). The majority of caregivers for children of migrant parents who work and live in the United States are grandparents with very low levels of education. They are reported to be uncomfortable with the school system and not able to monitor their grandchildren's work. Parents are generally better educated than their previous generation and thus are more capable of helping with children's study, and they tend to be more invested and interested in children's education. Absence of parents might imply lack of academic support for children in the home.

When children misbehave because of lack of effective supervision, it may also directly affect their school performance. Studies show that authoritative parenting is positively associated with adolescent school performance, while authoritarian parenting and permissive parenting have a detrimental impact on grades (Dornbusch et al. 1987).[24] Ye and Pan (2011) showed that left-behind children spend a large proportion of time watching Television at home or playing computer games in Internet bars. On the one hand, they may have increased pocket money from parental

[24] Authoritative parents demand and encourage maturity and independence in their children, and are responsive to their needs; authoritarian parents have high expectations of conformity and obedience but low responsiveness; and permissive parents are responsive to their children's needs but have low behavioral expectations for them.

remittances. On the other, their aged grandparents tend to be less effective in disciplining or controlling them.

Dreby (2007) documented cases from Mexico where teenagers of migrants to the United States displayed problematic behaviors such as smoking, drinking, pregnancy, and gang activity, and they have difficulties in school. Ambiguous lines of authority between substitute caregivers and migrant parents make supervising adolescents harder (Dreby 2007). Grandparents as substitute caregivers tend to be more lenient with very young children than parents, and they find it more difficult to retain authority when the children grow older.

Moreover, migrant parents attempt to please their teenagers by showing more understanding and support and not exercising parental authority from a distance. This further weakens the authority substitute caregivers have over children. The cumulative consequence of lack of parental supervision may be that the child gradually loses interest in, and lacks dedication to, schoolwork.

However, without systematic empirical examination, these discussions about decreased parental supervision, involvement in study, or children's dedication to schoolwork due to parental labor out-migration remain largely speculative. This research tries to explicitly examine how parental labor migration may affect children's educational outcomes through reduced supervision and involvement.

3.2.3 Parental Migration and Parental Divorce

In family structure and child development literature, children in divorced or single-parent families, compared to those who stay with both parents, are generally found to be disadvantaged in terms of educational outcomes and other aspects of wellbeing (Amato and Cheadle 2005; Cherlin et al. 1998; MacLanahan and Sandefur 1994). Their disadvantages are likely due to fewer economic resources, less parental

attention and care, and psychological challenges associated with adjusting to parental conflict and new family arrangements (Amato and Keith 1991; Amato 2000; Astone and McLanahan 1991; Carlson 2006).

In China, an increasing number of children are growing up in non-intact families, as the divorce rate has been rising in China (Wang and Zhou 2010; Zeng and Wu 2000). The crude divorce rate was only 0.33 in 1979 and it increased to 1.59 in 2007 (Wang and Zhou 2010). In 2012, more than 31 million couples dissolved their marriage and the crude divorce rate was 2.29.[25] Moreover, divorce sometimes overlaps with labor out-migration, as suggested in the media reports.[26]

As I discussed earlier in Chapter 2, labor out-migration of adult members of the family involves labor division between genders and generations. Spouses may become separated from each other for long periods of time due to out-migration of one party or migration of both parties to different destinations. Considering the extensive literature on the negative impact of parental divorce on children's wellbeing, it will be worth examining whether parental migration increases the risks of children being in non-intact families.

One theoretical foundation for hypotheses about the relationship between migration and marital instability is drawn from studies on social integration and divorce (Booth et al. 1991; Breault and Kposowa 1987; Glenn and Shelton 1985; Glenn and Supancic 1984; Trovato 1986). The basic argument made in this literature is that the level of social integration is negatively related to divorce rates. Where

[25] See Ministry of Civil Affairs of China, "2012 Statistical Communiqué on Social Service Development ", from: http://cws.mca.gov.cn/article/tjbg/201306/20130600474746.shtml, accessed on June 11, 2014.
[26] See China Daily, 2 March 2012, "Marriage at risk for migrant worker", from: http://www.chinadaily.com.cn/china/2012-03/02/content_14735711.htm; and Zhou Wenting, China Daily, 6 May 2011, "Migrant worker life hard on marriages", from: http://www.chinadaily.com.cn/china/2011-05/06/content_12455041.htm, accessed on October 2, 2014

social integration is high, married persons are embedded in a tight-knit network of friends, acquaintances, and extended family members, which helps to enforce compliance with social norms emphasizing marital commitment and family cohesion.

At the individual level, those who migrate are unlikely to be as well integrated into the social fabric as their non-migrant counterparts. As married couples become loosely placed in collective ties, both social support for the maintenance of their union, and barriers to the dissolution of their marriages, decrease. Therefore, increased individual mobility is potentially related to a high probability of marriage dissolution.

Studies on the impact of international labor migration on families in Indonesia also suggest potential association between labor out-migration and marital instability (Hugo 1995; Hugo 2002). In their research based on pooled life-history data collected in Puerto Rico and the United States, Landale and Ogena (1995) found that individual women's recent and lifetime migration experiences were strongly associated with higher rates of union instability, compared to those who have never migrated. Another study using both individual-level and community-level data from Mexico found that individuals with extensive U.S. migration experience, and residents in communities with medium international migration levels, had higher odds of union dissolution (Frank and Wildsmith 2005).

These findings, however, do not imply that divorce is an inevitable outcome of individual labor out-migration. Labor out-migration could be a way to get away from an unhappy or even abusive marital relationship. In other words, it might be the case that marital problems lead to both divorce and labor out-migration. The strong association between labor migration and marital dissolution could also be partly explained by a "selection effect".

Moreover, as revealed by life-history data from Vietnam, cultural ideas prioritizing sustainment of household over couple's intimacy and emotional relationship show notable resiliency despite migration and extended spousal separation (Locke et al. 2014).

These cultural ideas emphasizing the collective welfare of the household certainly exist in rural China as many migrant workers and their family members adopt split-household strategies. However, being a married couple across time and space tends to involve straining marital roles and relationships, changes in normative values and social control levels, and increased chances of transgression, and thus signals greater chances of marital instability, estrangement, or dissolution (Shu 2007). One study, using panel data from the China Health and Nutrition Survey (CHNS), found that the labor out-migration status of household member significantly increased the risk of divorce by 60% (Du 2010).

On the one hand, the existing family literature has documented extensively to what extent and how children from divorced and single-parent families are faring worse than children who stay with both parents. On the other, social integration theories and some empirical evidence suggest that labor migration is associated with higher risks of divorce. Synthesizing from both sides, this study endeavors to explore the role of parental divorce as a potential channel linking parental labor migration and child outcome.

3.3 Social Remittance Perspective

The social remittance perspective focuses on the ideas, behaviors, norms, and values transmitted by migrant workers from their work destinations to their origin communities (Levitt 1998). Migrant parents are likely to adopt new knowledge, values, and practices, from destination cities that are often perceived as more

advanced both socially and economically than their home communities, and they are likely to transmit their newly acquired values, attitudes, and aspirations, to their children (Fan 2008; Toyota et al. 2007). This study focuses on one aspect of the social remittance associated with parental labor migration: the children's own perception of the value of education.

Education has long been a channel for upward social mobility in China, as is evidenced by the age-old Imperial Exam and Public Official Selection System. In almost every modern society, education remains one of the major systems of social stratification, where the best-educated members occupy the most prestigious and better-paid jobs.

Although aggregate and abstract statistics show that the returns on education are high and that investment in education pays off in the long run, people's perception of the importance of education is embedded more concretely in their own labor market experiences or what they observe in their immediate contexts, including family members, relatives, friends, co-workers, or peers.

Many migrant parents learn from their own experiences, or by observing the urban industrial world around them, that education is the key to white-collar jobs, and is perhaps the only way for their children to achieve a different life from theirs. Conversely, other parents, who are doing well in the market economy despite their limited education, may tend to emphasize more on gaining practical skills and experience rather than obtaining formal schooling, in planning for their children's future.

Similarly, the children's own experience with city life and their parents' work environment may inspire them to pursue further education for their future careers in the city. How significant this pathway is in the association between parental migration

and awareness of the value of education and educational outcomes of children is yet to be examined by empirical studies.

On the other hand, migration of family members may provide left-behind adolescents with access to information on migrating processes and employment opportunities, contacts and advice, and food and accommodation, decreasing the risks involved in labor migration and facilitating adaptation to new environments. Labor migration thus becomes a viable alternative to economic mobility for such children, competing with investment in education (De Brauw and Giles 2006).

When expected returns on education are not high, children are demotivated from pursuing higher educational aspirations, and labor migration becomes a more attractive option. Basing their study on survey data in the Mexican context, Kandel and Kao (2001) found that higher levels of U.S. migration within families are negatively related to children's aspirations to attend a university. Education obtained in Mexico is not equally rewarded in the U.S. labor market as it is in the Mexican labor market, which discourages investment in Mexican schooling.

This study intends to explore the potential effect of social remittance through the transmission of education value from parents to children. Parental value on education is linked to their aspiration for their children's educational attainment and their children's educational values and aspirations. Children who perceive education as crucial to their future development are more willing to devote time and effort to study and are more likely to do well in school and move on to the next level of the school system.

3.4 Social and Cultural Differences in the Association between Parental Migration and Child Outcome

It has been increasingly recognized that differences in broader social and cultural contexts may shape the dynamics of family structure and children's wellbeing.

Burgeoning studies regarding labor migration and family outcome in different developing countries have demonstrated the importance of characteristics of extended family, labor market, and gender relationship. China, sharing similar values and norms with other societies to some extent and possessing certain distinct cultural characteristics and institutional settings, provides an interesting case to examine parental migration and child outcome.

3.4.1 Father-migration vs. Mother-migration

As studies in China and other developing countries suggest, whom children are separated from is an important dimension of measuring left-behind children that needs to be taken into consideration. Deeply embedded gender norms and expectations are likely to lead to different consequences for father-away migrant families and mother-away migrant families. A mother's labor migration seems to be more disruptive and detrimental than a father's labor migration in the children's daily life, since mothers are traditionally viewed as the primary caregiver of children, and fathers as the breadwinner (Asis et al. 2004; Fan 2008; Parreñas 2001).

Labor migration used to be a male-dominated phenomenon, which causes less disruption to parental roles and family norms as a father's labor out-migration still fit his role as the family breadwinner. In past decades, a reverse phenomenon has emerged wherein transnational labor migration of mothers has increased dramatically in other developing countries such as the Philippines (Asis et al. 2004).

Using interview data from 709 Grade 4-6 school children in the Philippines, Battistella and Conaco (1998) revealed that mother-absent children have the lowest general average school grades and class ranks. This finding remains simply descriptive however, as it is not clear whether the differences in average school

performance among both-parents-present, father-absent, mother-absent and both-parents-absent children are statistically significant.

Though male-dominance in labor migration is no longer true for young Chinese migrant workers who are still single, a mother's out-migration is much less frequent. Collating survey data on rural children in Hunan province, Wen and Lin (2012) found that children of migrant mothers are most disadvantaged in terms of school engagement, but children left behind by fathers and both parents are not necessarily worse off.

Similarly, in a study based upon national representative panel data from China Health and Nutrition Survey (CHNS), Lu (2012) found that children of mother-migrants fared worse than children of father-migrants in terms of educational progress, but surprisingly that children left behind by both parents were not necessarily worse off than others. In the case of families in which both parents are migrant workers, greater financial resources might weaken the adverse effects of the absence of both the father and the mother.

3.4.2 Gender differences

In the context of a developing society, parental evaluation of returns on education for different children, and household resource constraints, are prominent determinants of children's school enrollment (Buchmann 2000). With a long tradition of son preference, parental migration is likely to affect girls and boys differently in rural China. Marriage and family structure has traditionally been patrilineal in China. Upon marriage, women reside with the husband's family and shoulder the costs and labor of providing for parents-in-law. Since parents tend to rely on sons for old-age support and since men receive higher returns on education in the labor market than

women, parents may have a stronger motivation to invest in a son's education than that of a daughter.

Using data from the 1995 China Living Standards Survey conducted in adjacent northeastern provinces of Hebei and Liaoning, Meyerhoefer and Chen (2011) found that parental labor migration was associated with a .7 grade-level lag in educational attainment among girls. However, it is not clear whether this female grade-level lag is in fact the impact of parental migration or simply because of a late start to school. They also found a negative association between parental labor migration and boys' educational progress, but this effect was not statistically significant. Through what mechanisms parental migration negatively affected the educational progress of girls was not directly addressed in their study.

Some studies found a larger effect of parental wealth or community wealth for girls than for boys, indicating a larger penalty for girls in families under financial constraints (Connelly and Zheng 2003; Davis et al. 2007). For example, Connelly and Zheng (2003) studied the 1990 Chinese Census and found that rural girls were disadvantaged in terms of both school enrollment and graduation; girls were equally disadvantaged by having a younger brother or a younger sister but boys were less disadvantaged by a younger sister than by having a younger brother; village in-school rates and county per capita income have larger effects for girls than boys.

The female disadvantage in educational progress might also be due to a greater demand on girls' time toward household chores in migrant households. In a study based upon the China Health and Nutrition Survey from 1997 to 2006, Chang, Dong and Macphail (2011) found that migration of household members substantially increases the time spent on farm work and domestic work by the left-behind elderly and children. The increase in work time was greater for elderly women and girls than

for elderly men and boys. For instance, the migration of one parent increased domestic work time by 0.751 hours per day for girls and 0.239 hours per day for boys.

Other researchers have examined the role of parental aspiration and investment in creating the gender difference in educational outcome and revealed a rather complicated picture, using longitudinal data from rural northwest China (Hannum et al. 2009; Zhang et al. 2007). On the one hand, Chinese mothers continue to expect future support from sons more than from daughters, and those who hold traditional gender values have stronger bias toward sons in aspirations for children (Zhang et al. 2007). On the other, the persisting traditional gender values do not explain the modest one-third of a year gap in attained schooling between boys and girls, and parental aspirations tend to be high for both girls and boys and parental economic investments show no gender bias (Hannum et al. 2009). It is possible that Chinese parents are holding on to certain aspects of the traditional gender values while moving away from the other aspects amid the rapid socioeconomic changes unfolding in contemporary China.

Therefore, it is necessary to examine the role of children's gender and sibship size in the association between parental labor migration and children's educational outcomes in rural China. This research will add to our knowledge about whether there are gender differences in educational achievement and whether gender modifies the effects of parental labor migration on educational outcomes.

3.5 Peers, School, Community and Children's Educational Outcomes

Researchers have recognized the importance of peers, teachers, school contexts, and neighborhoods for child and adolescent development (Ainsworth 2002; Chen et al. 2003; Crowder and South 2003; Fischer and Kmec 2004; MacLeod 1987; Rankin and Quane 2002). In developing countries where educational resources tend to

be inadequate or unevenly distributed, researchers have found that physical facilities such as textbooks, classrooms, libraries, and teacher education and training are important predictors of academic achievement (Buchmann and Hannum 2001; Heyneman and Loxley 1983; Lockheed et al. 1986). At the neighborhood level, the salience of material inputs—for instance, the provision of school—is also evident. For example, employing data from the 1992 National Sample Survey of the Situation of Chinese Children, Hannum (2003) has found that living in villages with greater economic resources and better access to junior high school significantly increased the likelihood of school enrollment for children.

Other researchers have examined the impact of school processes and found significant effects of actual teaching practices, teacher-student interactions, student-student support, and classroom environment and dynamics on student achievement (An et al. 2007; Jia et al. 2009; Lloyd et al. 2000; Lockheed and Komenan 1989). Unsurprisingly, the local environment also matters. Using the 2004 and 2009 waves of data from the Gansu Survey of Children and Families, Hannum et al. (2011) have shown that the average level of education in the village is significantly associated with the odds of graduating from middle school, taking the high school entrance exam, and transitioning to high school.

In the Chinese context, education and school life are greatly emphasized and central to adolescents' lives (Chen et al. 2003). Secondary school students in rural China spend most of their time studying in schools, and interacting with peers and teachers. Teachers have been traditionally highly perceived and respected in China. Chinese teachers are not only responsible for teaching, but also assigned with duties to take care of students' daily lives at school and supervise students' behavior. It is reasonable to expect a significant effect of school characteristics on the educational

achievement of rural adolescents. To better understand the influence of family factors—particularly parental labor migration in this research—on adolescents' educational outcomes, it is important to take into consideration the unobserved school/neighborhood factors.

3.6 Summary

All factors taken into account thus far reveal that the theoretical considerations of the relationship between parental migration and the educational wellbeing of left-behind children demonstrate that parental migration is a comprehensive and dynamic phenomenon. The different facets of parental migration may function both to benefit, or harm, the wellbeing and achievements of their children. For example, on the one hand, parental migration brings in increased economic resources for the child's education and comfort, but on the other hand, the emotional burden caused by the parent-child separation could hinder the child's overall development. A sound general explanation of the relationship between parental labor migration and children's educational wellbeing thus needs to synthesize different perspectives.

The economic resources mechanism in the association between parental labor migration and child outcome has received more research attention and empirical support, compared to the family structure and parenting perspective and the social remittance perspective. Few scholars have paid attention to the potential role of parental divorce in understanding the impact of parental labor migration on children's wellbeing. This study will contribute to a more comprehensive understanding of the consequences of parental labor migration for adolescents' educational outcomes by combining and simultaneously examining the different perspectives with newly collected detailed quantitative and qualitative data.

The literature has also highlighted the influence of a broader sociocultural context on shaping the pattern of association between parental migration and educational outcome. Since the mother is traditionally held responsible for running the household and childcare, and the father for supporting the family economically, the mother's out-migration may generate different socio-cultural and psychological meanings for the child from the out-migration of the father. In addition to the gendered division of labor, the life trajectories of rural Chinese youth may also be subject to persisting son preference. It is important that both the gender of migrant parents and the gender and sibship size of left-behind children be taken into consideration when we try to answer how parental migration may affect children's lives.

The significance of peers, teachers, school, and community, in children's lives may grow as the latter advance in age, because adolescents spend an increasing amount of time outside the home interacting with peers and other non-family adults. This is especially true for rural adolescents in China with a testing-oriented competitive school system. It is reasonable to test if there is a strong influence of the school social eco-system upon Chinese adolescents.

Chapter 4 Research Methodology

This chapter develops research designs for a comprehensive examination of the impact of parental labor migration on the educational wellbeing of their children. In the first section of this chapter, I propose a research framework that synthesizes the theoretical perspectives developed in existing family structure and child development literature as well as migration research (see Figure 4.1). This research framework emphasizes that parental migration is a multi-dimensional process affecting the lives of their children in numerous direct and indirect ways. A set of hypotheses that tests each pathway linking parental migration to adolescents' educational attainment is introduced in the second section.

The following three sections provide information on how the data were collected (Section 4.3), how the data were prepared for analysis (Section 4.4), and how the data analyses were conducted (Section 4.5). The last section is a discussion of the strengths and limitations of the research designs.

4.1 A Research Framework for Parental Migration and Children's Educational Outcomes

Deriving from both family structure and child development literature and migration research, I argue that a synthesized framework—that conceptualizes parental migration as a dynamic and multi-faceted phenomenon and situates children in the wider context of family, school and neighborhood—is needed to better understand how parental migration affects the lives of their children.

Multiple mechanisms—some positive while others negative—link parental migration to child outcomes. Overall, the general impact of parental migration on their children's educational outcome is rather ambiguous. This acknowledgement is

reflected in the research framework of parental migration developed for the current study (see Figure 4.1).

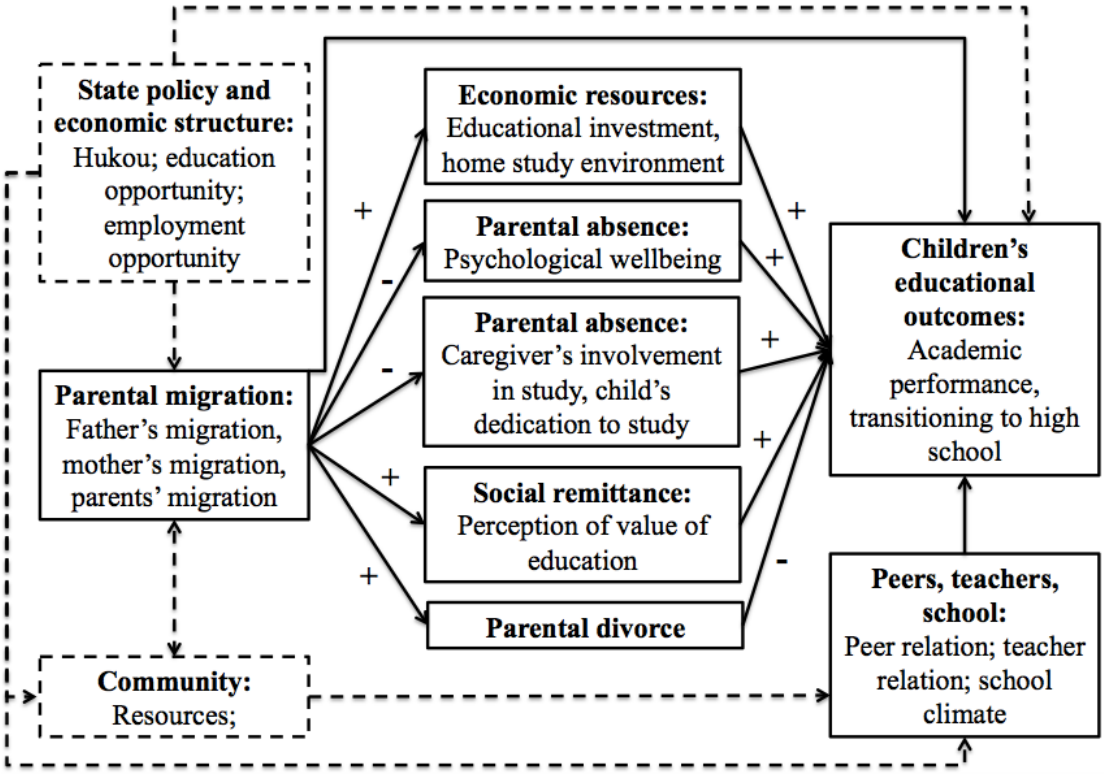


Figure 4.1 A Research Framework of Parental Migration and Children's Educational Outcomes

The research framework clearly demonstrates that the effect of parental labor migration on children's educational outcomes depends on whether the beneficial pathways will countervail the adverse pathways. If the positive effects of increased economic resources and enhanced education value are large enough to offset the negative effects of parental absence, then an overall positive effect of parental labor migration is observed. Conversely, if the negative effects of long-term parent-child separation are greater, we will discern a negative total effect of parental migration.

In addition to the family, the school is another important social institution for the socialization of children. Schools differ in terms of quantity and quality of facilities and resources, average family background, and academic ability of students.

Researchers in western contexts have widely noticed the potential effect of school settings on child outcome (Alexander and Eckland 1977; Alwin and Otto 1977; Duncan et al. 2001; Eamon 2005; Marsh and Hau 2003). For rural Chinese adolescents, who spend a great amount of time in school, I expect peers, teachers, and the school environment play an important role in their educational aspirations and achievements.

It should be pointed out that, as Figure 4.1 shows, circular parental migration and parent-child separation is situated in specific institutional contexts and economic structures of China. At an individual or household level, the parental migration decision is also shaped by the availability of local resources and opportunities. At the same time, large-scale labor out-migration may fundamentally change the demographic and social structure of the origin community. These broader structures and local settings will shed light upon how the mediating pathways between parental migration and an adolescent's education attainment unfold in this study.

4.2 Hypotheses

In this research, I intend to test the association between parental labor migration and the educational attainment of their children. I am particularly interested in how parental migration influences adolescents' transition to high school. With this objective in mind, I developed research hypotheses about the relationship between parental labor migration and the academic performance and transition outcome of their adolescents.

To explore whether the generally gloomy picture portrayed in mass media reports and anecdotal observations on the lives of left-behind children holds true under empirical examination, this research tests the following hypotheses about the gross effects of parental migration on adolescents' educational outcomes:

Parental migration is negatively associated with adolescents' academic performance (Hypothesis 1a) and positively associated with the likelihood of leaving school and going to vocational high school relative to going to academic high school (Hypothesis 1b).

The following set of hypotheses covers five potential mediating channels explored in this research: economic resources and home study environment, psychological wellbeing, caregivers' involvement in study and adolescents' dedication to study, and finally, adolescents' education value, and parental divorce.

Parental migration increases family economic resources, and thus improves the study environment for adolescents at home (Hypothesis2a).

Home study environment helps to mitigate part of the effect of parental migration on adolescents' academic performance and transitioning outcome (Hypothesis 2b).

"Home study environment" refers to the availability of cognitive materials and books at home.

Children from migrant families report a higher level of depressive symptoms than children from non-migrant families (Hypothesis 3a).

Inclusion of depressive symptoms helps to account for part of the effect of parental migration on adolescents' academic performance and transitioning outcome (Hypothesis 3b).

Primary caregivers in migrant families are involved less in children's study than those in non-migrant families (Hypothesis 4a).

Primary caregiver's involvement in children's study could explain part of the effect of parental migration on the adolescent's academic performance (Hypothesis 4b).

Adolescents from migrant families are less dedicated to study than their counterparts from non-migrant families (Hypothesis 5a).

Adolescents' dedication to study helps to explain part of the effect of parental migration on academic performance (Hypothesis 5b).

Adolescents from migrant families hold stronger values toward education than their counterparts from non-migrant families (Hypothesis 6a).

Education value helps to mitigate part of the effect of parental migration on transitioning outcome (Hypothesis 6b).

Adolescents of migrant parents are more likely to be in a divorced or step-family than their counterparts of non-migrant parents (Hypothesis 7a).

Part of the effect of parental migration on adolescents' academic performance and transitioning outcome is transmitted through parental divorce (Hypothesis 7b).

Existing literature suggests that the type of parental migration also matters. This research hypothesizes that adolescents left behind by migrant mothers are most disadvantaged in terms of educational outcomes, as compared to non-left-behind children and those left behind by migrant fathers or both parents:

The negative impact of parental migration on adolescents' academic performance and transitioning outcome is most significant in mother-migrant families (Hypothesis 8).

In this study, I also examine whether there are gender differences in the outcome of transition to high school and whether gender moderates the effect of parental migration on educational outcomes:

Boys are more likely to enroll in academic high school than girls. Girls are more likely to enroll in vocational high schools or start doing migrant work than boys (Hypothesis 9a).

Parental migration has different effects on boys and girls (Hypothesis 9b).

The final hypothesis is about the effects of school on adolescent children:

Adolescents enrolled in schools with better resources have better educational outcomes than their counterparts enrolled in other schools (Hypothesis 10).

4.3 Data

To test these research hypotheses, I have collected data from a migrant-sending county located in Hubei Province of central China. The target population was final-year adolescents in Middle School. Focusing on final-year middle school adolescents allowed me to observe transitioning outcomes given the time and finance permitted by the pursuance of this research. Both quantitative and qualitative data were obtained from adolescents and their caregivers and teachers at multiple points of time between September 2012 and October 2013.

4.3.1 Sampling and Recruiting Process

To delve into the mechanisms through which parental migration affects children's wellbeing, I concentrated the limited research resources available to me on a sample from a migrant-sending community in rural China. The findings from this research will be informative to many other similar contexts in rural communities across China. Moreover, I conducted robustness checks by comparing the results of my research with findings from other studies that derived from national representative samples, and doing additional analyses using a recent national representative sample.

To diversify the adolescent sample, I used stratified cluster sampling. Tongcheng County, my fieldwork site, is currently divided into two townships and nine towns,[27] which vary in population size, share of agricultural population, income

[27] The difference between towns and townships is that towns tend to have lower share of agricultural population and higher population density. See State Council's Approval of 'A Report on Adjusting Criteria for Establishing Town' by Ministry of Civil Affairs:

level and out-migration rates. There are 18 middle schools distributed across Tongcheng County: six are located in the town where county government is based, nine in the other eight towns and three in the two townships. For my research I chose one township school, one town school, and one school from the county town.

Table 4.1 presents basic information about population, migration and average income first for the county as a whole, and then separately for the towns and township where the selected schools are located. The county town is the most economically developed and hosts more than one-fifth of Tongcheng's total population and all four high schools in the county. Amongst the two towns and one township in Table 4.1, the county town has the lowest proportion of agricultural population and labor out-migration rate and the highest per capita net income.

Table 4.1 Population, Migration and Income of Tongcheng County and Selected Towns and Township in Year 2010

	Tongcheng County	Selected township	County town	Selected town
Total population	490,616	60,730	105,776	36,337
% Agricultural population	79	89	38	84
Population involved in labor out-migration	95,277	14,232	8,395	7,963
% Population involved in labor out-migration	19	23	8	22
Per capita net income of rural residents (RMB)	5,538	4,985	5,765	5,300

Data source: Tongcheng Statistical Yearbook 2011

My next step was to meet with the form teachers who were usually also serving as the teacher of a particular subject. With the permission of the form teachers, I went to each classroom to explain my research to the adolescents and distributed printouts of letters that I had prepared for the children and their caregivers. An information sheet and a consent form were presented in the form of letters directed to

http://qhs.mca.gov.cn/article/zcwj/qhgl/200711/20071100004361.shtml, accessed on September 16, 2014

children and caregiver participants separately. The adolescents and caregivers were informed, through the letters, about the study to be conducted and of their right to withdraw freely at any time, and ensured confidentiality to the disclosures made by them.

I recruited all final-year adolescents from these three middle schools and yielded a sample size of 452 (see Table 4.2). Half of the adolescents were boys and the rest were girls.

Table 4.2 Number of Adolescents by School and Gender

	Total sample	Township School	County town School	Town School
Number of Classes	11	2	6	3
Number of Boys	225	35	132	58
Number of Girls	227	41	131	55
Total Number of Adolescents	452	76	263	113

Final-year middle school adolescents are at a crucial transitioning stage in their life: either they make the cut into an academic high school, which promises a greater chance of going to college, or they opt for a vocational high school or technical school, or they may repeat for a second chance, or they choose not to pursue further education upon dropping-out or upon graduation from middle school. I was particularly interested to study the role of parental migration in children's educational outcomes.

4.3.2 Collection of Data: Questionnaire Survey, In-depth Interview and School Record

To investigate the mechanisms through which parental migration affects their children's educational wellbeing, I used mixed methods to collect information at multiple time points from adolescents, their parents or other caregivers, teachers, and schools. I administered the survey with the entire sample of adolescents, their caregivers, and their teachers. From this sample pool, I targeted a subsample of

adolescents and conducted in-depth interviews with them and some of their caregivers and teachers. Other sources of data included exam records, class schedules, teachers' qualifications, quantity of library resources and laboratory facilities from the schools, in addition to county statistics.

4.3.2.1 Survey Information

The first round of questionnaire survey was conducted in October 2012. Adolescents completed the self-administered questionnaire in the classroom. The adolescent questionnaire includes sections on their home study environment, time use and diet, school life, parental migration history, parenting and parent-child relationship, values, feelings and aspirations. Most of the questions were multiple-choice items while a few were open-ended, directly asking the adolescents about how they thought and felt about their parents' labor out-migration. Adolescents also took home a family questionnaire to be completed with help from adult family members, and a caregiver questionnaire to be filled out by their primary caregivers. The family questionnaires and caregiver questionnaires amassed information on family structure and socioeconomic status, children's living arrangement history, the characteristics of the caregivers, and aspirations for children.

The response rate that I received from the adolescent questionnaires was high (nearly 100%), but that was not the case with the caregiver questionnaires (lower than 84%) and family questionnaires (about 60%). I made follow-up calls to caregivers with contact numbers provided by the adolescents to ask for missing information. In some cases (about 65% of the caregivers I have tried to contact) I succeeded in getting the information I needed, but in other cases (about 5%) caregivers declined to answer my questions. In yet other cases (about 30%) I did not successfully manage to reach them.

Eleven form teachers finished the teacher questionnaire for each adolescent in their class. In middle schools in China, adolescents of one class usually stay in the same class under the same form teacher throughout the academic year, or even for a longer period. A form teacher not just teaches a single subject to the class but also closely monitors and supervises every aspect of adolescents' school lives, and is responsible for contacting parents whenever needed. In the teacher questionnaire, the form teachers assessed the adolescent's attitude to study, behavior, and peer relation, and expressed their expectation of the adolescent and their perception of parental involvement in an adolescent's education.

In May 2013, one month before the high school entrance exam, I conducted the second round of questionnaire surveys for adolescents. Besides requesting information that the adolescents did not provide in the first round, I asked searching questions about their current expectations, aspirations for their future career, and the expectations of their parents.

4.3.2.2 Subsample and Interview Information

The purpose of deriving a subsample from the whole sample for in-depth interviews was to provide informative insights on mechanisms through which parental migration and other family dynamics shape children's lives. I thus selected adolescents that represented a wide range of variation in parental migration status. I included both left-behind and non-left-behind children to get contrasting cases. I also tried to balance the subsample in terms of gender and family socio-economic status.

After I produced the shortlist of adolescent participants, I discussed their circumstances with form teachers and revised the list accordingly. I then approached the adolescents on the revised list one by one, and asked for their consent to participate in the qualitative part of this research. After they expressed interest and

gave their consent, I scheduled the times and venues for a one-on-one and face-to-face interview with each individual participant. The interview venue was either an empty office on campus or a separate room in a nearby cafeteria, based on the convenience of the adolescents, and also to ensure very little disturbance. I contacted some of the adolescents' parents and other caregivers for home visits and face-to-face interviews. Most interviews with adolescents lasted for about 25–40 minutes, while interviews with caregivers took much longer. I also conducted formal interviews and informal discussions with form teachers and school officials.

My interview questions to adolescents were centered on their experiences and feelings in school, at home and their wishes and worries for the future. Interviews with caregivers focused on family circumstances, work history, and parenting. Interviews with teachers delved into the details of the adolescents' behavior and life on campus, teachers' experience and views about work, and the challenges they were facing.

Across the period from October 2012 to February 2013, I conducted 38 interviews with adolescents, 23 interviews with caregivers and 5 interviews with teachers (see Table 4.3). I also had informal conversations and discussions with teachers and school administrators. To ensure the confidentiality of the participants, I use pseudonyms for all of them, and also for the schools under scrutiny in this research.

Table 4.3 Characteristics of Adolescent, Caregiver, and Teacher Participants for In-depth Interview

	Adolescent participants (38)
Gender composition	17 males; 21 females
Parental migration status	17 non-left-behind; 5 left behind by father; 2 left behind by mother; 14 left behind by parents
	Caregiver participants (23)
Relationship to child	11 mothers; 4 fathers; 6 grandparents; 1 stepmother; 1 uncle
	Teacher participants (5)
Role of teacher	4 form teachers; 1 school official

In May-June 2013, I followed up with teachers about the dropouts from school, tried to contact the dropouts, and succeeded in talking to eight of them, about 27% of those I have tried to contact, through online chatting software. I asked questions about the process of, and reasons for, their dropping out of school.

4.3.2.3 Information on Transitioning Outcome

From September to October 2013, three months after the High School Entrance exam, I obtained the records of high school exam scores and academic high school enrollment from the bureau of education and the academic high schools of Tongcheng through personal contact. I then matched these records with the adolescent sample that I had taken earlier. I also obtained information on the educational status or whereabouts of those who were missing from the records, with the help of middle school and high school teachers.

4.4 Measures

4.4.1 The Type of Parental Migration

The main independent variable in this research is the type of parental migration. It is widely noted in foregoing literature that the gender of the migrant and absent parent matters with regard to a child's life and wellbeing. In the context of rural China and in many other Asian contexts, mothers are perceived to be the

primary caregiver for children. The concept of the father being at home while the mother is away and working full-time is at odds with the traditional norm of gendered labor division in family life. When both parents are away working as migrant workers, children are usually left under the care and supervision of grandparents and other extended kin. The number and the gender of migrant parent potentially changes a whole set of family dynamics for children. It is important to take into account the different forms of parental migration and absence.

In this research, adolescents are divided into four groups according to the caregiver status of parents in the first round of the survey: 1) non-migrant, when both parents are primary caregivers; 2) father-migrant, when the mother is the primary caregiver and the father is away; 3) mother-migrant, when the father is the primary caregiver and the mother is away; and 4) parents-migrant, when both parents are not the primary caregivers and both are away from the home village.

As I argued in Chapter 2, I believe that relying on the snapshot, the categorical measurement only, may not be sufficient to capture the dynamic process of parental absence due to labor migration. I derived two variables to measure the length of time a child had been living separately from the father or the mother cumulatively, based on information of the history and change of the child's living arrangement, the duration of time living apart from the father or mother, and the duration of time living together with the father or mother. The cumulative length of father-child separation and mother-child separation are measured in years. As I will illustrate in Chapter 5, the four-category measurement based on the caregiver status of parents in 2012 is able to capture neatly the long-term pattern of parent-child separation. Therefore, in the following analysis of this dissertation, I will mainly rely on the type of parental migration to test hypotheses.

4.4.2 Measures of Academic Performance and Transitioning Outcome

I used raw Chinese and Math scores in a countywide comprehensive examination held by the county bureau of education in November 2012 to measure academic performance. All final-year adolescents in middle schools in Tongcheng took part in this uniform and compulsory exam at the same time and on the same dates. I could also have used the records of the High School Entrance Exam held in June 2013, but a number of adolescents had left school already and did not take this exam.

My initial strategy was to code an adolescent's educational transitioning outcome into eight categories: 1) dropped out and stayed at home or started doing migrant work; 2) stayed at home after graduation; 3) started doing migrant work after graduation; 4) going to vocational school; 5) going to the county's second-best academic high school; 6) going to the county's best academic high school; 7) going to the best academic high school at the prefecture city; and 8) repeating the ninth grade. However, given the limited sample size and the rarity of certain categories of this educational outcome variable, the inclusion of all these categories in the analysis was not warranted. Therefore, in accordance with the focus of my analysis, I recoded transitioning outcomes into three categories: "not continuing with schooling", "enrolled in vocational high school", and "enrolled in academic high school". It should be noted that repeating the ninth grade was excluded from this three-category variable.

As I discussed in Chapter 2, it is important to distinguish between going to vocational high school and going to academic high school. As the High School Entrance Exam scores threshold is much higher for academic high school than for vocational high school, going to academic high school indicates higher educational achievement and also promises a greater chance of getting into a higher education

institute. Moreover, academic high school education is more costly than vocational high school education, and thus requires greater financial commitment from adolescents and their families.

4.4.3 Measures of Potential Mediating Variables

Economic resources and educational investment

One potential channel through which parental migration could affect children's education is an increase in educational investment and an improvement in the home study environment, since more financial resources are available. Unfortunately, I did not have enough valid responses to questions on amount of remittance and educational expenses from the survey questionnaire. Instead, I used the father's monthly income, the mother's monthly income, and family computer ownership as proxy for economic resources.

The father's monthly income and the mother's monthly income, for purposes of this study, are measured on a 1–10 scale: 0–1,000 RMB; 1,001–1,500; 1,501–2,000; 2,001–2,500; 2,501–3000; 3,001–3,500; 3,501–4,000; 4,001–5,000; 5,001–6,000; and 6,000 RMB or more. These two variables are treated as continuous variables in data analysis.

Family computer ownership is a dummy variable that indicates whether an adolescent's family owns a computer at home or not. This variable, the best available piece of information on family economic situation in the dataset, is used to capture the wealth status of the family.

Adolescents indicated the number of books they had at home by choosing from the following categories: none; less than 10; 10–20; 21–50; 51–100; 101–500; or more than 500. I recoded their answers and created a dummy variable "having more than a few books at home": 0 if they chose "none" or "less than 10", and 1 if they

ticked the other categories. This variable is used to measure the educational investment of the parents.

Psychological wellbeing

An indirect way that parental absence could influence children's school performance is through psychological wellbeing. Depression is often found to be associated with poor school performance, possibly because it is more difficult for depressed adolescents to concentrate on school work and to be motivated toward learning (Fröjd et al. 2008). Long-term parent-child separation potentially reduces the parental attention and care that children can receive and significantly impacts the parent-child bonding. This could possibly lead to increased levels of depressive symptoms in left-behind children.

I adopted a scale of depressive symptoms from the 2010 Child Questionnaire of Chinese Family Panel Studies (CFPS) conducted by Beijing University.[28] The list includes: 1) feeling depressed, unexcited about anything; 2) feeling anxious; 3) feeling uneasy, restless, finding it difficult to remain calm; 4) feeling the future is hopeless; 5) finding it difficult to do anything; 6) feeling life is meaningless. Adolescents indicated their frequency of feeling in specific ways in the past month on a 1–5 scale in which: 1=never; 2=sometimes; 3=half of the time; 4=often; and 5=almost every day. Thereafter, an index of depressive symptoms was constructed by taking the mean score over the six items. The alpha coefficient (α) for the depressive symptoms scale is 0.85.

Caregiver's involvement in study

I used five items to measure a caregiver's involvement in the child's study. These included: 1) talking about what happened in school with the child; 2)

[28] Chinese Family Panel Studies: http://www.isss.edu.cn/cfps/EN/

discussing the child's study plan or objective with him or her; 3) asking the child how he or she is doing in homework; 4) asking the child how he or she fares in exams; and 5) contacting the teacher to check how the child performs academically and how he or she behaves in school. Caregivers indicated the frequency of their involvement in each activity on a 1–6 scale in which 1 represented "never"; 2 "several times a year"; 3 "once or twice a month"; 4 "about once a week"; 5 "more than once per week"; and 6 "everyday". The caregiver's involvement in study index was constructed by taking the mean score of these six items. The alpha coefficient (α) for the scale is 0.77.

Social remittance: education value

The ideas, values, and practices migrant parents obtain from destination areas and transmit back to their places of origin could potentially affect children's attitudes and aspirations. This study particularly focuses on adolescent's education value. Adolescents who perceive that education is important and that formal schooling is crucial to future success are likely to aspire for higher levels of educational attainment and to be more dedicated to study. I created a scale to measure adolescents' value about education. Adolescents indicated on a 1 (completely disagree) –4 (completely agree) scale how much they agreed with the following statements: 1) college education is necessary for me to do what I want to do in the future; (2) I need to get good scores in school in order to get a good job when I grow up; and (3) performing well in school is the best way to future success for me. The alpha coefficient (α) for the education value index is 0.83.

Dedication to study

To investigate the level of devotion that adolescents have toward their study, I examined a set of items in which form teachers reported on adolescents' studying attitudes and behaviors. Teachers rated on a 1 (completely disagree) –5 (completely

agree) scale whether they agreed with the following statements: 1) this student has good studying attitudes; 2) this student studies very hard; 3) this student concentrates on what he or she is doing; and 4) this student always perseveres in doing things. The alpha coefficient (α) for the dedication to study scale stood at 0.92.

Parental divorce

Family research literature has well established the disadvantages children face in a divorced family. In China, large-scale labor migration has led to a vast number of couples living apart. Long-term separation and growing mobility potentially increases the incidence of divorce. In this study, I suggest that parental divorce could be a potential pathway through which parental migration affects a child's wellbeing. Parental divorce is entered as a dummy variable indicating whether a particular adolescent's parents have divorced or not.

4.4.4 Measures of Control Variables

A series of demographic and socioeconomic status variables may intervene in the association between parental migration and an adolescent's educational attainment. These factors need to be controlled in order to better understand how parental migration affects children's wellbeing. The potential confounding variables controlled in this research are as follows:

Gender

Being female is coded as 1 and being male is coded as 0. The difference between genders is well noticed in social stratification research. Gendered norms and expectations in rural China are likely to moderate the influence of parental migration on children.

Age

Age is a continuous variable, measured in months.

Number of siblings

Sibling size may suggest at least two meanings in the context of this research: the one is that siblings compete for the limited total resources of their family; the other is that taking care of young siblings could deprive a child of time, especially a girl.

Parental education attainment

Both the father's education attainment and the mother's education attainment are measured by three categories: primary school or below, middle school, and high school or above. The data are entered as two dummy variables: middle school education and high school or above education, with primary school or below as the reference category.

School

School is represented as two dummy variables: township school and town school, with county town school as the reference category.

4.5 Analytic Methods

4.5.1 General Analytic Approach

A primary research interest of this study lies in understanding how parental labor migration affects adolescent's transitioning from middle school to high school. A natural comparison group for children who are left behind by migrant parents is those living with both non-migrant parents. In this study, children left behind by the father only, the mother only, and by both parents, are compared with their non-left-behind counterparts.

However, the survey data I obtained from fieldwork has an inherent multilevel structure: students nested within classes and classes nested within schools. To identify the effect of parental labor migration on an adolescent's educational outcomes, the

confounding effects of school or neighborhood related characteristics must be taken into consideration.

One popular way to deal with hierarchical data is to use multilevel modeling, which usually involves one single response variable that is measured at the individual level and a number of explanatory variables that are measured at both individual and group levels (Hox 2010). However, for accuracy of estimates and high power of tests, multilevel regression based on asymptotic methods generally requires a large number of groups.

Multilevel modeling was clearly not an appropriate method to use in this research since there were only three groups (schools) in my survey data. An alternative analytical strategy for hierarchical data is to use a fixed effects model by including a set of dummy variables for groups. This acts as a control for all unobserved factors related to location of school/neighborhood, and thus facilitates examination of the effect of parental labor migration on outcome variables.

As a starting point, I first showed simple descriptive statistics and conducted one-way analysis of variance (ANOVA), t-test, Chi-square test, or Fisher's exact test to examine if the four groups of adolescents differed in any of the mediating and outcome variables.

My next step was to conduct multivariate analyses to identify the associations between type of parental migration and mediating variables and educational outcomes, while controlling for potential confounding variables. Ordinary Least Squares (OLS) regression was used when the specific dependent variable of interest is continuous. Logistic regression was used for binary dependent variable, and multinomial logistic regression was used for multiple-category nominal variables.

Structural equation modeling, or more specifically path analysis, was then used for a full-scale analysis of the direct and indirect effects of parental migration on academic performance and transitioning outcome of their children. Path analysis is widely used for examining mediation effects because it allows researchers to analyze more complicated models with multiple independent and dependent variables (Cheung 2007; Stage et al. 2004).

4.5.2 Final Analytic Sample and Item Nonresponse

The information I collected from the 452 adolescents in the whole sample revealed that nine adolescents had lost their fathers, six had lost their mothers, and one adolescent had lost both parents. To reduce the complication of examining how children from migrant families fare relative to those from non-migrant families, I excluded those adolescents who had lost one or both parents from the data analysis. Since this group of adolescents is miniscule in size, I do not expect that their exclusion from the analysis would bias the research findings. This step left us with a sample of 436 adolescents, 96% of the total number of adolescents sampled.

I also excluded from data analysis those adolescents whose final transitioning outcomes were incomplete on account of missing information. In total, 13 more cases were therefore excluded. Finally, due to the low quality of teacher questionnaires from one particular form teacher, all students from this class were excluded from the final analytic sample to minimize potential biases in data analysis (See Table 4.4). The size of the final analytic sample used in the statistical analysis of this research is 385.

Table 4.4 Information on Cases that Are Excluded from Data Analysis

Exclusion criteria	Number of cases excluded	Number of cases remaining
Parental death	16	436
Missing information on transitioning outcome	13	423
Membership of a particular class with low quality teacher questionnaire	38	385

I compared the characteristics of those included in and those excluded from the final analytic sample and found no significant differences in gender, age, number of siblings, parents' educational attainment and monthly income, parental marital status, family computer ownership, number of books at home, depressive symptom scores, caregiver's involvement in study, education value and dedication to study. Compared with those who remained in the study, those who were excluded were only marginally different ($p<0.07$) in terms of type of parental labor migration.

Table 4.5 lists the nonresponse rates of key variables in the final analytic sample. As already mentioned, variables derived from adolescent questionnaires and school records generally had low nonresponse rates, whereas variables based on caregiver questionnaires and family questionnaires had relatively higher nonresponse rates. The reasons for high item nonresponse rates in caregiver and family questionnaires may include any or all of the following: adolescents or their caregivers did not have time or did not want to fill in the questionnaire, or they found it difficult to provide retrospective information in answering some of the questions. Fortunately, most key variables to this research are taken from the adolescent questionnaires and school records.

Item nonresponse rates for the main independent variable and dependent variables are less than 1%. The item nonresponse rates are over 20% for caregiver's

involvement in study and around or less than 5% for measures of educational investment, psychological wellbeing, education value, dedication to study, and parental marital status. Among the demographic characteristics and socioeconomic status blocks, only the rates of missing values on father's age, mother's age, and monthly income exceeded 10%.

Table 4.5 Nonresponse Rates of Key Variables in Final Analytic Sample

Variables	Valid N (Total N=385)	Nonresponse rate (%)
Type of parental migration	383	0.52
Educational outcome		
Chinese test scores	383	0.52
Math test scores	383	0.52
Transitioning outcome	385	0.00
Mediating variables		
Having more than a few books at home	382	0.78
Depressive symptom scores	364	5.45
Caregiver's involvement in study	291	24.42
Education value	372	3.38
Dedication to study	379	1.56
Parental divorce	375	2.60
Demographic characteristics and socioeconomic status		
Gender (female=1)	385	0.00
Age (in months)	384	0.26
Number of siblings	366	4.94
Father's age	338	12.21
Mother's age	331	14.03
Father's education	377	2.08
Mother's education	374	2.86
Father's monthly income	350	9.09
Mother's monthly income	329	14.55
Having a computer at home	378	1.82
Location of school	385	0.00

4.5.3 Multiple Imputation for Missing Data

Missing values are a common problem in social survey research. Despite great efforts made to avoid them in the first place, in most cases researchers still need to deal with this problem of incomplete data. It gives rise to three major difficulties: (1) loss of information; (2) complication in data analysis; and (3) biased estimates due to systematic differences between the observed and missing data (Barnard and Meng

1999). Follow-up surveys or interviews with non-respondents are perhaps the only way to deal with the problem of loss of information. For the second and third problem, researchers have proposed many different solutions (Little and Rubin 2002).

Removing incomplete cases is one way to deal with the complication in data handling and analysis, if the discarded cases are a representative and small subset of the whole sample. When missing data are missing completely at random (MCAR), which is rarely the case in real-life studies, this strategy also leads to valid inferences. But in multivariate analysis, case-deletion may result in an omission of a large portion of the data and an unacceptable loss of power (Schafer 1999).

Weighting adjusting for nonresponse is a simple device for reducing bias from complete-case analysis (Little and Rubin 2002). It is most useful in large surveys with nonresponse missing at random. There are also a number of single imputation methods, which are now regarded as inadequate (Royston 2004). In recent decades, following the seminal work of Rubin (Rubin 1987), multiple imputation, a Monte Carlo technique replacing missing values with two or more simulated values, has become a popular method to handle the missing values issue.

There are different ways by which to perform multiple imputation. In my research, I am following the approach of van Buuren, Boshuizen, and Knook (Van Buuren et al. 1999; Van Buuren 2007) to multiple imputation. In this multiple imputation by chained equations (MICE) approach, researchers specify a set of imputation models, one for each incomplete variable. The whole process can be broken down into several steps (Azur et al. 2011; White et al. 2011).

In the first step, a simple imputation fills in all missing values with randomly sampled replacement from the observed values. In the second step, the observed values of the first incomplete variable are regressed on the other variables in the

imputation model. Predictions from this regression model then replace the missing values of the first variable. Next, the observed values of the second variable with missing values are regressed on the other variables in the imputation model, using the imputed values of the first variable. Again, posterior predictions of the second variable are drawn to fill in its missing values. These steps are then repeated for each of the other incomplete variables. When the process is completed for all variables, it is called an iteration or cycle. In general, to produce a single imputed dataset, a number of cycles are performed. The entire imputation procedure is repeated multiple times to produce multiple imputed datasets. In total, 40 imputations were performed and the specified multivariate models were run on each imputed dataset in this research. The final estimates of the coefficients and standard errors were then computed by applying combination rules (Rubin 1987) to the 40 completed-data estimates.

4.6 Strengths and Limitations

This research uses most recently collected data on left-behind adolescents in rural China and obtains a wealth of information on adolescents from multiple perspectives by using both the questionnaire survey and in-depth interview. By exploring roles of different mechanisms, this study provides informative insights into the social impacts of labor migration and family dynamics in rural China. In particular, following the transition process of final-year middle school adolescents into high school allows me to shed light on the long-term impact of parental migration on children's educational attainment. The inclusion of children from both migrant and non-migrant families provides comparison groups and helps in my attempt to identify the impact of parental migration.

A limitation of this study is the relatively small and non-probability sample. Financial and time constraints did not permit me to yield a larger and more representative sample. For this reason, the findings generated by this research cannot be generalized to the broader context without caution. The data collected from caregivers were obtained by a self-administered questionnaire; and nonresponse rates are high with people with limited education. This problem will be dealt with using multiple imputation modeling for multivariate regression analysis and maximum likelihood estimation under path analysis.

I also do not include urban local children and migrant children in this study and submit that the time period covered in this study is limited. This restricts our understanding of the impact of internal migration on children's wellbeing in China. A long-term panel study that includes non-left-behind children and left-behind children in rural China, and migrant children and local children in urban China, would be the ideal way to identify the causal relationship, and delineate the mediating mechanisms, between parental migration and the educational outcome of their children.

Chapter 5 Descriptive Analyses

This chapter presents information about the analytic sample and descriptive statistics for the independent, dependent, mediating, and control variables used in this study.

Adolescents are divided into four groups: non-migrant, father-migrant, mother-migrant, and parents-migrant. In the first section, I show the socioeconomic characteristics for the sample as a whole and for the four groups separately. I conducted one-way analysis of variance (ANOVA) to determine whether the four groups of adolescents differ in age, father's age, mother's age, and number of siblings. I have used Chi-square tests to check whether there is any difference in gender composition, parents' educational attainment, occupation status and monthly income, and family computer ownership by the type of parental labor migration.

Next, I present both qualitative and quantitative information on parental labor migration, parent-child separation and characteristics of non-parent caregivers. This is to give a contextual idea about the history and characteristics of parental labor migration, the frequency of parent-child communication and reunion, reasons that children have not migrated with parents, and everyday situations for final year adolescents in rural middle schools of China. I emphasize the dominant role of the school in rural adolescent's daily schedule.

5.1 Basic Demographic Characteristics and Socioeconomic Background of Adolescents

Table 5.1A presents basic demographic and parental characteristics for the adolescents whom I have included in the final analytic sample. Columns 3 to 6 show separate values for four groups by parental migration status. The last column shows the average values for all the adolescents.

The average age for these last-year middle school students is 14.91, with little variation by parents' migration status. Half of the adolescents are girls. The average sibling size for this sample is around 0.96 and adolescents do not differ in terms of the number of siblings by the type of parental labor migration. The average age for fathers is 41 and for mothers 39. This gender gap in age among married couples is not a surprise, given the Chinese marriage norm of women marrying up and men marrying down. For children left behind by both parents, their migrant fathers and mothers are slightly younger with an average age of 40 and 38 respectively. This difference in parents' age is significant, but not substantial.

The Chinese people are required by law to finish nine years of compulsory education comprising six years of primary school and three years of middle school. In rural China, many people do not pursue further schooling beyond compulsory education and some even drop out from middle schools or even primary schools. Thus the average educational level of rural Chinese is not high, which is also reflected in my fieldwork data.

Table 5.1A Demographic Characteristics and Socioeconomic Background of Adolescents by Parental Labor Migration

Variables	N	Non-migrant (153)	Father-migrant (79)	Mother-migrant (55)	Parents-migrant (96)	Total (383)
Age (Mean, (SD))	384	14.86 (0.74)	14.92 (0.68)	15.03 (0.61)	14.90 (0.68)	14.91 (0.69)
Female (%)	385	51.6	49.4	45.5	53.1	50.4
Number of siblings (Mean, (SD))	366	1.01 (0.60)	0.92 (0.48)	1.02 (0.73)	0.90 (0.73)	0.96 (0.63)
Father's age** (Mean, (SD))	338	41.65 (3.54)	41.79 (3.48)	42.02 (2.92)	40.1 (2.87)	41.36 (3.35)
Mother's age** (Mean, (SD))	331	39.27 (3.10)	39.45 (2.94)	39.83 (2.98)	38.05 (2.85)	39.10 (3.04)
Father's education	377					
% Primary school or below		14.7	22.1	24.1	27.4	20.7
% Middle school		52.7	44.2	50.0	47.4	49.1
% High school and above		32.7	33.8	25.9	25.3	30.2
Mother's education	374					
% Primary school or below		30.0	26.9	29.4	38.7	31.3
% Middle school		54.0	60.3	52.9	48.4	54.0
% High school and above		16.0	12.8	17.6	12.9	14.7
Father's monthly income	350					
% 1,500 RMB or less		23.8	16.9	32.0	17.6	22.0
% 1,501-3,000 RMB		58.7	54.9	40.0	57.6	55.1
% 3,001 RMB or more		17.5	28.2	28.0	24.7	22.9
Mother's monthly income***	329					
% 1,500 RMB or less		52.3	65.2	38.3	31.0	47.1
% 1,501-3,000 RMB		39.1	34.8	48.9	50.6	42.9
% 3,001 RMB or more		8.6	0.0	12.8	18.4	10.0
Having a computer at home (%)	378	49.3	41.0	38.9	44.8	45.0
Location of middle school***	385					
% Township		17.6	15.2	10.9	26.0	18.2
% County town		67.3	53.2	45.5	41.7	54.8
% Town		15.0	31.6	43.6	32.3	27.0

Note: One-way analysis-of-variance (ANOVA) test shows that the mean of father's age and mother's age differs significantly among the types of parental labor migration; Fisher's exact test shows that mother's monthly income differs significantly among the types of parental labor migration; Chi-square test shows that there is a strong association between type of parental labor migration and location of middle school.
*p<0.05; **p<0.01; ***p<0.001

Among the fathers, less than a third had high school or above education and about one fifth had only primary education or less. The fathers of children who are left behind by mother or both parents are less educated than the fathers of non-left-behind children and children left behind by fathers. About 25–26% of fathers in the former two groups had high school and above education while 33–34% of fathers in the latter two groups completed high school or more. The mothers, on average, have attained even lower education, with nearly a third having only primary education or less and only 15% having high school education or above. The share of high school and above graduates is the highest among the mothers of children left behind by mothers (17.6%) and the lowest among the mothers of children left behind by fathers (12.8%). However, we notice that these differences in the educational attainment of fathers and mothers by parental labor migration status are not statistically significant.

More than one fifth of the fathers and nearly half of the mothers earn a monthly income less than 1,500 RMB, whereas nearly one fifth of the fathers and about one tenth of the mothers earn more than 3,000 RMB monthly. There is no statistically significant difference in the fathers' monthly income by their migration status, but the mothers' labor migration significantly increases their monthly income level. We see from Table 5.1A that less than 40% of migrant mothers are receiving less than 1,500 RMB monthly while 52% of non-migrant mothers and 65% of left-behind mothers are in this income category.

About 45% of families have a computer at home and there is no significant difference in terms of family computer ownership by parental labor migration among the four groups of adolescents, except that mother-migrant families appear to be the most disadvantaged in this regard.

Overall, 18% of children were studying in the township school, 55% in the county town school, and 27% in the town school. However, the four groups of children were, distributed in significantly different proportions among the three schools. For example, 67% of non-left-behind children, 53% of children left-behind by fathers, 46% of children left behind by mothers and 42% of children left behind by parents were in the county town school. Moreover, 15% of non-left-behind children, compared with 32% of children left behind by fathers, 44% of children left behind by mothers, and 33% of children left behind by both parents were in the town school.

This pattern could be partially the result of self-selection of adolescents from non-migrant families into county town schools. There are differences in the availability of off-farm employment and the average socioeconomic status of residents between different towns. The decision to do migrant work and the decision to choose which middle school to enroll the child are likely to be not entirely independent. Parents who care more about children's study may choose to enroll their children in county town schools and to stay at home instead of going out for migrant work.

However, self-selection is not the full story, because there are several barriers for non-local residents to enroll their children in a county town school. The first one is economic, involving housing expenses or rental costs if the family relocates to the county town and transportation fees if they choose not to move. For middle school students in many places in China, school hours are usually very long. In Tongcheng County, middle school students have evening self-study sessions that may last until 8-9 pm, while public buses plying between the towns, townships and the county town are available until only 6pm. It is unlikely for adolescents to live in the towns or townships but attend school in the county town, unless they are boarding schools.

The Hukou restriction on the recruitment of middle school students is a second and more important barrier. To enroll in a certain middle school in the county town, one needs to have locally registered Hukou in that school district and it is very difficult or costly to change one's Hukou status.

Overall, comparing the demographic and socioeconomic characteristics across groups of adolescents, Table 5.1A shows that adolescents are similar in many aspects but modestly distinct in parental age. They are the same in terms of age and gender composition, which is unsurprising since the sample includes only last-year middle school students. There is also no statistically significant difference among them with regard to the number of siblings, parents' educational background and family computer ownership. However, children left behind by both migrant parents tend to have younger parents, compared with children of other groups.

Table 5.1B presents child characteristics and socioeconomic background by gender and the location of school. Girls have younger fathers and mothers and are themselves younger, compared with boys. This might be because boys are delayed more in school progress than girls.

Interestingly, on average, girls have 1.07 siblings while boys have only 0.87 siblings. Due to the persistent preference for sons in rural China, parents are more likely to have a second child if their first is a girl. Further analysis of my data indeed shows that relatively fewer girls have older siblings but more girls have younger siblings than boys. The average number of older brothers, older sisters, younger brothers and younger sisters for girls is 0.02, 0.06, 0.60 and 0.38 respectively, and for boys is 0.04, 0.20, 0.34 and 0.28 respectively.

Table 5.1B Demographic Characteristics and Socioeconomic Background of Adolescents by Gender and by Location of Schools

Variables	N	Gender		Location of school		
		Male (191)	Female (194)	Township (70)	County town (211)	Town (104)
Age (Mean, (SD))	384	15.14 (0.68)	14.68*** (0.62)	14.94 (0.73)	14.86 (0.71)	15.00 (0.64)
Female (%)	385			52.9	51.2	47.1
Number of siblings (Mean, (SD))	366	0.85 (0.57)	1.07*** (0.67)	1.10 (0.60)	0.93 (0.65)	0.95 (0.61)
Father's age (Mean, (SD))	338	42.00 (3.63)	40.81** (3.00)	40.73 (3.71)	41.70 (3.22)	41.12 (3.33)
Mother's age (Mean, (SD))	331	39.69 (3.19)	38.60** (2.82)	38.66 (3.26)	39.35 (2.90)	38.87 (3.16)
Father's education	377					***
% Primary school or below		19.5	21.9	25.7	15.6	27.5
% Middle school		50.3	47.9	57.1	42.4	56.9
% High school and above		30.3	30.2	17.1	42.0	15.7
Mother's education	374					***
% Primary school or below		32.6	30.0	46.4	22.1	39.6
% Middle school		50.0	57.9	42.0	57.8	54.5
% High school and above		17.4	12.1	11.6	20.1	5.9
Father's monthly income	350		*			
% 1,500 RMB or less		16.8	26.8	17.2	22.5	24.2
% 1,501-3,000 RMB		54.5	55.7	57.8	56.0	51.6
% 3,001 RMB or more		28.7	17.5	25.0	21.5	24.2
Mother's monthly income	329					
% 1,500 RMB or less		47.8	46.4	45.0	51.6	39.1
% 1,501-3,000 RMB		42.2	43.5	46.7	37.4	51.7
% 3,001 RMB or more		9.9	10.1	8.3	11.0	9.2
Having a computer at home (%)	378	51.6	38.4*	33.8	57.3	27.9***

Note: One-way ANOVA test is conducted for age, number of siblings, father's age and mother's age and Chi-square test is conducted for gender, father's and mother's education and monthly income, family computer ownership to examine whether there is significant difference by gender and by location of school.
*p<0.05; **p<0.01; ***p<0.001

Furthermore, although we observe no gender difference in the educational attainment of the fathers and mothers and the mothers' monthly income, girls and boys differ in the income level of their fathers. 27% of girls have fathers in the low-

income category (below 1,500 RMB per month) and only 18% of girls have fathers in the high-income category (3,001 RMB or more per month), while 17% and 29% of boys have fathers in these two income categories respectively. As I will show in Chapter 6, girls' fathers seem to be less committed to earning money. Presumably related to the father's lower income levels, only 38% of girls have a computer at home, compared with 52% of boys.

There is no statistically significant difference in the mean of age, gender composition, the average number of siblings, the mean of father's age and mother's age among adolescents by location of school. However, adolescents from the county town school have better-educated fathers, better-educated mothers, and higher family wealth status in terms of computer ownership than those from the town school and township school. Interestingly, there is no statistically significant difference between adolescents from different schools in terms of the monthly income level of fathers and mothers.

Due to the gender difference in sibling size and the monthly income level of fathers, and the school/neighborhood difference in parental socioeconomic status, it is likely that gender and the location of school affect the adolescent's educational outcomes. In multivariate analysis, both gender and school/neighborhood fixed effects will be controlled in the examination of the impact of parental labor migration on children's educational progress.

5.2 Parental Labor Migration and Adolescents' Daily Life

5.2.1 Basic Information on Parental Labor Migration and Parent-child Contact and Reunion

This section focuses on the left-behind children. As I discussed in Chapters 1, 3 and 4, parental migration has many dimensions with regard to how it might influence children's lives. Labor migrants without a corresponding change in the

Hukou status are perceived as the "floating population" in China. Despite their ambiguous and temporary status in the destinations, they often rely on doing migrant work as a long-term livelihood strategy. This is apparent in the cumulative number of years spent by the migrant fathers and mothers being separated from their children (see Table 5.2). Among children categorized as non-left-behind at the time of my first-round survey, they spent an average of 2.5 years away from their fathers and 2.6 years away from their mothers. Although their parents were not migrant workers in 2012, they probably have done some migrant work for some time since the child's birth.

Among those left behind by the fathers, the duration of father-child separation (5.4 years) is longer than that of mother-child separation (3.5 years). Conversely, among those left behind by the mothers, the duration of mother-child separation (5.4 years) is longer than that of father-child separation (4.1 years). This suggests that this one-time measure of children's left-behind status does not capture some long-term pattern in parental migration.

In the last group — children left behind by both parents — the time span of father-child separation and mother-child separation is as long as 9.1 years and 8.7 years. Considering the average age of those adolescents, the total length of parental absence spans nearly three fifths of their childhood and early adolescence.

The distribution of destinations of migrant parents from the Tongcheng County reflects the general geographical pattern of China's internal migration (see Table 5.2). I have shown only the destinations of migrant parents when children were in Grade 7 in this table, because the pattern of where migrant parents remained nearly unchanged when children were in Grade 8 or 9.

We can see that the majority of migrant parents in my sample were in the Pearl River delta and the Yangtze River delta regions. About 53% of fathers and 51% of mothers went to Guangzhou, Shenzhen, Dongguan and other places in the Province of Guangdong for migrant work. Another 23% of fathers and 37% of mothers chose Shanghai, Jiangsu and Zhejiang as destinations. Only 14% of fathers and 5% of mothers migrated within the Hubei province. We also notice that migrant mothers tend to move over longer distances and tend to work in the eastern coastal areas than fathers do.

The long-distance labor migration by parents suggests greater time and monetary costs of parent-child reunion either through parents' home visits or children's travels to the destination areas. 37% of migrant fathers and 41% of migrant mothers visited home at least twice a year, but an even higher proportion of migrant fathers (52%) and mothers (45%) do so only once a year (see Table 5.2). In addition, 11% of migrant fathers and 14% of migrant mothers returned home less than once a year. My data also suggests that parents migrating within Hubei province visit home more often than those who went to the southern or eastern coastal areas in China.

Table 5.2 Basic Characteristics of Parental Labor Migration and Parent-child Contact and Reunion

Cumulative length of parent-child separation					
	Non-migrant	Father-migrant	Mother-migrant	Parents-migrant	All
Father-child (years, Mean (SD)) (N=354)	2.53 (3.45)	5.36 (4.63)	4.06 (3.75)	9.09 (4.04)	4.93 (4.68)
Mother-child (years, Mean (SD)) (N=345)	2.57 (3.34)	3.51 (3.56)	5.39 (4.13)	8.69 (4.39)	4.61 (4.50)

Where did parent go when you were in the 7th grade?					
	Within Hubei province	Shanghai, Jiangsu, and Zhejiang	Guangdong province	Other provinces or cities	Total
Father (N=118)	14%	23%	53%	10%	100%
Mother (N=95)	5%	37%	51%	7%	100%

How often did parent come home?				
	At least twice a year	Once a year	Less than once a year	Total
Father (N=163)	37%	52%	11%	100%
Mother (N=139)	41%	45%	14%	100%

How long did parents stay for home visit?					
	10 days or less	11–30 days	31–60 days	60+ days	Total
Father (N=138)	21%	26%	36%	17%	100%
Mother (N=111)	20%	25%	35%	20%	100%

How often did parents call?						
	Never	Less than once a month	1 to 3 times a month	Once a week	2 or more times a week	Total
Father (N=111)	9%	8%	19%	25%	39%	100%
Mother (N=88)	8%	9%	16%	31%	36%	100%

Have you ever been to the places where father or mother has done migrant work?					
	Non-migrant	Father-migrant	Mother-migrant	Parents-migrant	All
Yes (N=249)	57%	54%	54%	71%	61%

If yes, how many times have you visited your parents? (N=141)				
Once	Twice	3–5 times	6 or more times	Total
28%	31%	29%	12%	100%

On an average year of migrant work, many parents stayed at home for a total of one to two months during home visits (see Table 5.2). 26% of migrant fathers and 25% of migrant mothers were home for more than ten days but less than one month. About a fifth of migrant parents spent less than ten days at home, while another fifth

spent more than two months at home. The pattern of brief home visits by migrant parents confirms what I have mentioned earlier about the total length of parent-child separation. Many left-behind children spent a substantial amount of time growing up without parents' physical presence.

Many parents attempt to maintain contact with their children by making regular phone calls, albeit at different frequencies (see Table 5.2). A total of 64% of fathers and 67% of mothers called their children at least once a week. Yet about 9% of fathers and 8% of mothers never called their children for the period of interest, and 8% of fathers and 9% of mothers called less than once a month. Through further investigation, I found that children whose parents never called or hardly called are more likely to be from divorced or step- family, and there seems to be a positive association between parents' educational attainment and the frequency of phone calls made by parents to their children. However, I do not have enough information to reveal why some parents rarely called their children.

Another way to parent-child reunion is that children travel to stay with their parents in the destination areas (Table 5.2). About 61% of children have visited their migrant parents in the cities at least once. Specifically, more than 70% of children left behind by both parents have traveled to visit them; the proportion for the other three groups of children ranges between 54–56%. This is perhaps not surprising. There is potentially greater necessity and possibility of parent-child co-residence in the cities during the many years parents spent away from home.

I have also asked the children the number of times they have visited parents in the city if they have ever been there (Table 5.2). About 59% of children have visited parents once or twice and 12% of children reported to have visited parents at least six

times. Based on my interview, parents sometimes try to be reunited with children in the places where they work during school summer break.

Children not only spent some of their summer vocations or other holiday breaks with parents in the cities, but also might attend schools near their parents' workplace. About 15% of children have attended schools in places where parents have done migrant work. On average, they have done 2.5 years of primary school and 0.4 years of middle school in places other than their hometown.

5.2.2 Why Do Adolescents Not Necessarily Want to Migrate with Parents?

However, when I asked the children whether they want to join their parents in the city and live and study there, less than one fourth of those who have had migrant parents answered "yes". About 45% of children did not want to migrate with their parents and the rest one third were indecisive. The main reasons given by children for their preferences include emotional needs, financial concerns, education quality, and social environment (see Table 5.3).

Many children who wanted to migrate with parents expressed their emotional needs to live with them and share their life, to be cared for, to be loved and supervised by them. For some children, city life is more exciting and interesting and hence they were attracted to it.

Likewise, children who did not want to migrate with parents use emotional reasoning for their decision—but in a different fashion. They harbored emotional attachments to their friends, grandparents, and hometown and did not want to leave them. Conversely, a new environment at the destination area may not appear friendly. They found the place may be too crowded, the dialect would be different and migrants from other places may be hostile.

Table 5.3 Quotes from Adolescents Explaining Why They Want or Do Not Want to Migrate with Their Parents

Reasons	**Yes, I want to migrate with my parents**	**No, I don't want to migrate with my parents**
Emotional needs or attachment	"Because I can talk to my parents and tell them my inner thoughts." "Because I can see them every day." "Because I can stay together with them and be very happy." "Because I want to get more love from father and mother." "Because they can supervise me better." "Because if I study there, my parents would not need to worry about my schoolwork anymore."	"Because I do not have friends to play with there, and I have grandpa at home." "Because I don't want to leave my hometown." "Because I have many good friends here, and I feel a bit estranged from my parents." "Because I don't want to leave my grandpa and grandma who have taken care of me for all these years."
Financial concerns	N.A.	"Because it's too expensive." "Because I don't want to increase the burdens of my parents." "Because living is expensive there, everything is expensive." "Because it will only increase the burden of my parents."
Education	"Because the education conditions there are better." "Because the environment there is good and the education level is high, I can be *chu ren tou di* ("出人头地", to be head and shoulders above other people) faster."	"Because they don't have middle schools there. Besides, the promotion rate [from middle to high school] is not high. And I don't understand their dialect." "Because school there is expensive and I could not take the College Entrance Exam there."
Social environment	"Because the conditions there are good, it's *re nao* ("热闹", vibrant, noisy, exciting, lively) and feels safe." "Because it's fun there. And it's *re nao* at night." "Because I want to live in big cities." "Because I can see big city and make new friends."	"Because the environment there is unfamiliar to me. I am not accustomed to it. I am not able to communicate with classmates." "Because the environment there is not good, too many people, and roads are too crowded." "Because all non-locals are there, sometimes they bully you." "Because I could not express myself in [their] language."

The children are also aware of the different levels of living costs in hometowns and destination areas where migrant parents work. They cited financial considerations to explain why they did not want to migrate with parents. In addition, they were concerned with education quality and opportunity between original hometown and destination area.

Either through their own experience or knowledge learned from others, children understood the differences in education quality between the two places, and also the implication of the differences. One adolescent wrote that, "Because the environment there is good and the education level is high, I can be *chu ren tou di* ("出人头地", to be head and shoulders above other people) faster." However, it does not necessarily mean that they can take up better opportunity of education by migration. Children pointed out two barriers that hinder them from schools of good quality in the city: financial cost and the eligibility to take the College Entrance Exam. In places where the institutional restrictions are fewer, they found no provision or education services of low quality. One quote from an adolescent illustrates this: "Because they don't have middle school there. Besides, the promotion rate [from middle to high school] is not high."

5.2.3 Characteristics of Non-parent Caregivers

When parents cannot assume the role of primary caregivers for children, grandparents usually step in as surrogate parents. In my sample, among the adolescents taken care of by non-parents, about 80% of them have grandparents and another 20% of them have uncles, aunties or other relatives as the primary caregivers. The majority of non-parent caregivers are relatively senior in age. The mean age for those non-parent caregivers is around 59. Specifically, about 10% of non-parent

caregivers are aged 70 or more, and nearly 54% of them are aged between 60 and 69 (see Table 5.4).

Table 5.4 Basic Characteristics of Non-Parent Caregivers

	Below age 40	40–49	50–59	60–69	70+	Total
Age (N=89)	10%	10%	16%	54%	10%	100%
	Primary or lower		Middle school	High school or above		Total
Education attainment (N=110)	63%		24%	14%		100%
	0–2 years	3–5 years	6–11 years	12 years or more		Total
Years spent on taking care of children (N=95)	21%	15%	17%	47%		100%

Given their elder age, it is unsurprising that non-parent caregivers have even more limited educational attainment (see Table 5.4). Most non-parent caregivers (63%) have received only primary education or below. Less than a fourth have finished middle school education and less than 14% have attended high school or above.

These non-parent caregivers have cared for children of migrant parents for an average of 8.8 years. Nearly half of those children received at least 12 years of primary care from their grandparents or other relatives (see Table 5.4). Only about 21% of them were under non-parents' care for less than two years. This is consistent with the pattern on the length of parent-child separation we see earlier.

5.3 Dominant Role of School in Rural Adolescents' Daily Life

Middle schools in rural China play a dominant role in adolescent's daily life as long as they stay in school. This is especially true for this sample of final-year middle school adolescents who spend a tremendous amount of time studying on campus and preparing for the High School Entrance Exam. School day is extremely long because

they need to attend plenty of extra classes provided by schools, in addition to the regular classes outlined by the government curriculum policies.

Table 5.5 and Table 5.6 show a typical school schedule for Grade 9 adolescents in the Tongcheng County. Adolescents need to reach the school playground by 6:30 am for morning exercise every weekday whenever weather permits outdoor activity. After the exercise, they are required to return to classrooms, start reading aloud content from textbooks of Chinese, English, History or Politics depending on which weekday it is, and try to memorize materials that might be tested in exams. Usually teachers designated for the particular subjects for the class will be present in the classroom to monitor the students' progress.

Table 5.5 School Timetable for Grade 9 Students, Autumn Semester, 2012

Time		Schedule
Early morning	6:30—6:50	Morning exercise
	6:50—7:30	Morning read-aloud session
Morning	7:35—8:00	Breakfast, cleaning
	8:00--	Preparing for morning classes
	8:05—8:45	Period 1
	8:55—9:40	Period 2
	9:40—10:10	Morning exercise
	10:10—10:55	Period 3
	11:05—11:50	Period 4
Noon	11:50—12:40	Lunch break
	12:40—13:25	Noon self-study session
	13:25—13:45	Cleaning
Afternoon	13:45--	Preparing for afternoon classes
	13:50—14:40	Period 1
	14:40—14:55	Afternoon break
	14:55—15:40	Period 2
	15:50—16:35	Period 3
Evening	16:35—17:35	Supper break
	17:35--	Preparing for evening self-study sessions
	17:40—18:10	Period 1
	18:20—19:05	Period 2
	19:15—20:00	Period 3
	20:10—20:55	Period 4

After a 25-minute breakfast break during which students are also required to do cleaning tasks assigned to them, they will attend four morning 45-minute classes. Between periods, adolescents are allowed to have a break of ten minutes. In the middle of morning classes, between Periods 2 and 3, adolescents are assembled to the playground for another morning exercise.

Noontime is divided into a 50-minute lunch break, a 45-minute self-study session and a 20-minute cleaning session. Noon self-study session is devoted to one of the five subjects including Chinese, English, Mathematics, Physics, and Chemistry. During this session, teachers usually do not give lectures and adolescents are required to review lessons, do assignments or take tests under the invigilation of teachers.

After the three afternoon classes, adolescents take a supper break for about an hour and then need to prepare themselves for four evening self-study sessions, which are again dedicated to Chinese, English, Mathematics, Physics, or Chemistry. After the fourth evening self-study session ends at around 9pm, adolescents are allowed to go home or to dormitory, taking rest and restoring energy for next day's study.

In addition to the morning read-aloud session, noon and evening self-study sessions, morning and afternoon classes have a bias toward the subjects that carry great weight in the High School Entrance Exam (see Table 5.6).[29] It is worth noting that there is not a single slot assigned to Art, Computer Technology, Local History and Culture, or Life Skills. There is one session on Physical Education every week, possibly because it is one of the subjects tested in the High School Entrance Exam.

[29] As of year 2013, there are 12 subjects or tests with a total full score of 695 in High School Entrance Exam of Xianning Prefecture, Hubei Province: Chinese (full score: 120), Math (full score: 120), English (full score: 120), Physics (full score: 80), Chemistry (full score: 50), Politics (full score: 50), History (full score: 50), Biology (full score: 25), Local knowledge (full score: 10), Geography (full score: 25), Experiment (full score: 20), and PE (full score: 25).

Table 5.6 A Sample Weekday Timetable for Grade 9 Students

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Morning read-aloud session					
Period 1	Chinese	History	English	Politics	English
Morning classes					
Period 1	Physics	English	Mathematics	English	Chinese
Period 2	Chinese	Biology	Geography	Mathematics	Chinese
Period 3	Mathematics	Physics	Chinese	Mathematics	Chemistry
Period 4	English	Mathematics	P.E	Chinese	English
Noon self-study session					
Period 1	Chemistry	English	Mathematics	Chinese	Physics
Afternoon classes					
Period 1	Chemistry	History	Chemistry	Physics	Mathematics
Period 2	Mathematics	English	English	Politics	Physics
Period 3	Politics	Chinese	History	Class Meeting	Politics
Evening self-study sessions					
Periods 1-2	Mathematics	Chemistry	English	Chinese	Physics
Periods 3-4	Physics	Chinese	Mathematics	English	Chemistry

The school's dominance in adolescent's daily routine does not end on Friday evenings — extra classes and self-study sessions are scheduled on Saturdays and Sundays as well (see Table 5.7). Overall, adolescents took slightly more than half a day off every week.

Having breakfast, lunch and dinner in school canteens is also compulsory. Given the tight school schedule, having meals at home is not feasible for most, if not all, final-year adolescents. This strict school schedule apparently leaves little time for adolescents to interact with parents and other family members or to be involved in recreational activities.

Table 5.7 A Sample Weekend Timetable for Grade 9 Students

	Township school		**County town school**		**Town school**	
	Saturday	Sunday	Saturday	Sunday	Saturday	Sunday
Morning read-aloud session	Yes	Yes	Free	Free	Yes	Free
Morning classes	Yes	Yes	Yes	Yes	Yes	Yes
Afternoon classes	Yes	Free from 4pm	Yes for students with better performance	Yes for students with better performance	Free from 2:40pm	Yes
Evening self-study sessions	Yes	Free	Free	Free	Free	Yes

Extra testing-oriented classes organized by middle schools on weekdays, weekends, summer and winter breaks are so common that the Ministry of Education issued a document explicitly banning schools and teachers from conducting extra classes (MOE 2006). Another document of Ministry of Education calls on local governments and schools to not decrease the number of time slots allocated to art education (MOE 2008). Apparently, the government so far has failed to enforce its policies on the arrangement of compulsory education curriculum arrangement and the length of school time (Cheng et al. 2013; Yang and Tao 2013).

A number of reasons have been suggested to explain the remarkable length of school time and persistent existence of extra classes in middle schools of China (Cheng et al. 2013; Wei and Liu 1996; Xiong 2007; Yue 2004; Zhang and Wang 2006). The main explanation is that China's education system is highly competitive and testing-oriented. Limited slots in high school and higher education institutions are allocated primarily according to the results in High School Entrance Exam and

College Entrance Exam respectively. Competing within the academic track remains the dominant channel for upward social mobility.

Nearly all adolescents whom I have interviewed complained about the strict school discipline, the rigorous schedule, and the lack of time for playing and relaxing, for doing things that they like and enjoy, and for resting and sleeping. On the one hand, they hoped to finish this overwhelming and tiring final year in middle schools as soon as possible. On the other, they worried about taking the High School Entrance Exam without achieving their self-expectation and their parents' expectation.

Despite the wearisome school timetable, endless assignments and exams, and enormous pressure, many adolescents were trying hard to improve their academic performance. They understand that their future would be at stake if they do not perform well in this final stage of their middle school education. Their reluctance to attend the extra classes or self-study sessions individually is outweighed by peer pressure and the fear of lagging behind and of losing out in the High School Entrance Exam; hence they followed the school schedule. Some caregivers including parents and grandparents also expressed their disagreement with the demanding arrangement maintained by the schools. However, the majority of them were not critical of the schedules because such arrangements by the schools lie in agreement with parents' interests.

Firstly, nearly all parents hope that their children could better secure future success and prosperity through educational achievement. For better-informed parent who would find private tuition for their children if necessary, extra classes provided by the schools in a collective way are more affordable compared to private ones. For parents unable to coach the children in their studies, leaving children in school for extra classes is advantageous since teachers will coach them. Secondly, as children

are monitored in school for a prodigious amount of time, the parental burden of caring and supervising children is lessened greatly.

From the point of view of the schools, charging for extra classes and running school canteens bring in financial resources, which are in great need to fund school operation and maintenance because of insufficient governmental investment. Moreover, the students' performance in exams and progression rates to high school are very important, if not the only, criteria, when parents and government agencies compare and evaluate schools. Schools compete with each other for ranking and reputation — and even the pool of prospective students, as allowed by the Hukou regulation.

5.4 Educational Outcome by Parental Migration Status, Gender and the Location of School

Table 5.8 shows the average values of Chinese and Math test scores and the distribution of transitioning outcomes by parental labor migration type, gender and location of school. The upper half of the table presents educational outcomes for adolescents from non-migrant, father-migrant, mother-migrant and parents-migrant families respectively. The lower half of the table shows test scores and transitioning outcomes for girls and boys, and adolescents from three different schools. Results of F-test, t-test and Chi-square test are reported on whether these educational outcomes differ significantly among subgroups of adolescents.

The examination scores were from November 2012 when last-year students from all middle schools of the Tongcheng County took a unified exam. In many places of China, last-year middle school students have a monthly comprehensive examination on all subjects that are also tested in the High School Entrance Exam. These monthly exams are usually organized by the county bureau of education and held at the same time with all last-year middle school students in that county.

Here I show only test scores for Chinese and Math (the full score for both which is 120), because these two subjects are most commonly used in studies on child development. They are also considered the most important subjects in the secondary school education system of China. They carry the largest weights in the High School Entrance Exam — which is the reason underlying the phenomenon that schools and teachers allocate more teaching hours to them, and that students also dedicate most of their time and efforts to these subjects.

There are three categories under the outcome of transitioning process to high schools: not continuing education (students either dropped out before graduating from middle school or did not pursue further education after graduation), attending vocational high school, and attending academic high school. This information was obtained in October 2013, after the beginning of new school year in September.

From the first half of the table, we see that there is a significant difference in Chinese test scores by the type of parental labor migration. Overall, the average score for the Chinese language is 73.5. Children of non-migrant parents have the highest average Chinese scores of 76.0, followed by children left behind by both parents (73.6), children left behind by the mothers (71.1) and children left behind by the fathers (70.9). Although the gaps in test scores are not substantial, the pattern seems to suggest that children left behind by one migrant parent are disadvantaged in Chinese scores, relative to non-left-behind children. However, these four groups of adolescents do not differ in terms of Math test scores.

Table 5.8 Academic Performance and Transitioning Outcome by Parental Labor Migration type, Gender, and Location of School

	N	Non-migrant (153)	Father-migrant (79)	Mother-migrant (55)	Parents-migrant (96)	Total (383)
Academic performance						
Chinese scores (Mean, (SD))	383	75.99 (12.87)	70.90 (15.49)	71.13 (14.99)	73.59 (13.82)	73.47 (14.26)
F-test						3.04*
Math scores (Mean, (SD))	383	66.60 (26.66)	63.28 (23.61)	63.22 (26.08)	69.96 (25.69)	66.07 (25.82)
F-test						1.23
Transitioning outcome	385					
% Leaving school		9.2	6.3	12.7	15.6	10.9
% Vocational high school		15.7	31.6	32.7	18.8	22.3
% Academic high school		75.2	62.0	54.5	65.6	66.8
% Total		100.0	100.0	100.0	100.0	100.0
Chi-square (6)						16.6*

	Male (191)	Female (194)	Township school (70)	County town school (211)	Town school (104)
Academic performance					
Chinese scores (Mean, (SD))	69.18 (13.84)	77.69 (13.41)	70.9 (11.79)	79.24 (12.12)	63.61 (13.91)
t-test		-6.11***			
F-test					55.48***
Math scores (Mean, (SD))	65.34 (26.48)	66.79 (25.21)	70.64 (30.72)	66.58 (25.99)	61.98 (21.09)
t-test		-0.55			
F-test					2.46+
Transitioning outcome					
% Leaving school	14.1	7.7	8.6	6.2	22.1
% Vocational high school	20.4	24.2	31.4	10.9	39.4
% Academic high school	65.4	68.0	60.0	82.9	38.5
% Total	100.0	100.0	100.0	100.0	100.0
Chi-square (2)		4.34			
Chi-square (4)					66.45***

+p<0.1; *p<0.05; **p<0.01; ***p<0.001

The association between the transitioning outcome and the type of parental labor migration is also significant. On average, 67% of adolescents made their way into academic high schools, about 22% of adolescents went to vocational high schools, and the rest 11% stopped receiving formal schooling. However, more children left behind by one parent (31.6% of children left behind by father, and 32.7% of children left behind by mother) were in the category of vocational high school, and more children of both-migrant parents are in the category of leaving school (15.6%). Moreover, the proportion of adolescents who continue their education in academic high schools is lowest among the mother-migrant group (54.5%) and highest among the non-left-behind group (75.2%).

As the lower half of Table 5.8 presents, gender differences seem to be only significant in Chinese scores. On average, females scored higher than males in Chinese, by more than seven points. This finding on the female advantage in language is consistent with the literature (Halpern 2013; Stoet and Geary 2015; Strand et al. 2006). Girls are performing better than boys on languages across time and space and regardless of the testing instruments (school exams or cognition tests) used (Voyer and Voyer 2014).

There seems to be no gender difference in math scores. However, in multivariate analysis, when dedication to study is controlled for, girls are found to score lower than boys in Math. The sex differences in math performance are less clear in the literature. For example, in a recent study using PISA data, researchers found that, across nations, boys scored higher than girls in mathematics (Stoet and Geary 2013). But there was considerable variation in the extent of the sex differences between nations. In some countries, there is no sex difference in math performance; in some other countries, girls even do better than boys on mathematics test. Moreover,

there is no simple, linear relationship between sex differences in school performance and the degree of gender equality across societies (Stoet and Geary 2015).

In terms of transitioning outcome, a higher proportion of girls enrolled in vocational and academic high schools and a higher proportion of boys did not continue their education after middle schools. Although the test of bivariate association does not show a significant difference in the transitioning outcome by gender and in fact the pattern appears to be that girls are relatively better off than boys, we notice that no potentially confounding variables are controlled here.

Contrary to the pattern of associations between educational outcomes and the type of parental labor migration and gender, the differences in academic performance and transitioning outcome by the location of schools are both significant and substantial. Adolescents studying in the middle school located in the county town have the highest average test scores for Chinese (79.24), compared with those studying in middle schools located in the lower-level towns in the administrative hierarchy of China (70.9 for township school and 63.61 for town school). The gap in math test scores by the location of schools is only marginally statistically significant, with adolescents from the town school having the lowest scores.

More strikingly, about 22% of adolescents from the town school discontinued their formal education whereas about 9% of adolescents from the township school and around 6% of adolescents from the county town school did. Nearly 83% of adolescents from the county town school enrolled in academic high school, as compared with 60% of those from the township school and 39% of those from the town school. Finally, about 31% of adolescents from the township school and 39% of those from the town school proceeded to vocational high school, while only about 11% of those from the county town school continued with vocational education. This

suggests that the location of school plays a critical role in shaping adolescent's transitioning outcome. Those studied in the county town school have far greater chances of going to an academic high school and lower chances of leaving school.

5.5 Bivariate Associations among Parental Labor Migration and Mediating Variables

In Table 5.9, I have presented the bivariate associations between the left-behind status and the potential mediating variables. With regard to educational investment, children of non-migrant parents seem to have better access to books at home than children of migrant parents. About 73% of non-left-behind children reported to have more than a few books at home, while only about 68% of children with migrant fathers, 60% of children with migrant mothers and 59% of children with migrant parents did so.

The second mechanism looks at the level of caregiver's involvement in study. Caregivers of non-left-behind children are most involved in the children's schoolwork (with a score of 3.52), and caregivers of children left behind by both parents reported a lower level of supervision of the children's study (2.95) than their counterparts in the other three groups. This pattern is not surprising considering many children are taken care of by their grandparents when both parents are away doing migrant work. Senior age and a low educational attainment of grandparents potentially decrease their level of active involvement in the children's school life.

It is surprising that the level of depressive symptoms among the different groups of adolescents seems to be at the same level. Parental absence did not increase the scores of depressive symptoms of left-behind children.

Table 5.9 Bivariate Associations among Independent and Mediating Variables

	Non-migrant (153)	Father-migrant (79)	Mother-migrant (55)	Parents-migrant (96)	Total (383)	F-test	Chi-square (3)
Economic resources and educational investment							
% Having more than a few books at home (N=382)	73.0	67.9	60.0	58.9	66.5		6.46+
Parenting							
Caregiver's supervision of child's study (1-6) (Mean, (SD)) (N=291)	3.52 (0.92)	3.44 (0.89)	3.44 (1.03)	2.95 (1.01)	3.37 (0.97)	5.30**	
Psychological wellbeing							
Depressive symptoms (1-5) (Mean, (SD))(N=364)	2.00 (0.74)	1.91 (0.64)	2.08 (0.82)	2.02 (0.83)	1.99 (0.76)	0.61	
Value							
Values about education (1-4) (Mean, (SD))(N=372)	2.80 (0.69)	2.95 (0.72)	2.61 (0.76)	2.85 (0.78)	2.81 (0.73)	2.29+	
Dedication to study (1-5) (Mean, (SD))(N=379)	3.45 (0.78)	3.21 (0.77)	3.14 (0.87)	3.37 (0.76)	3.33 (0.80)	2.89*	
Family structure							
% Parental divorce (N=375)	5.3	5.3	18.5	18.3	10.4		16.35**

+p<0.10; *p<0.05; **p<0.01; ***p<0.001

The education value is an index measuring perceived importance of formal schooling and college education of adolescents. The difference in education value is only marginally statistically significant among the adolescents. Children from father-migrant families (with a score of 2.95) and both-parents-migrant families (2.85) have higher values about education than children from non-migrant families (2.80), whereas children from mother-migrant families have the lowest values about education (2.61).

The difference in adolescents' dedication to study evaluated by the form teacher is also statistically significant by the type of parental labor migration. Non-left-behind adolescents (3.45) and adolescents who are left behind by both parents (3.37) scored higher in the dedication to study index than adolescents left behind by their mothers (3.14) or by fathers (3.21). Multiple-comparison suggests that only the gap in the dedication to study between adolescents of migrant mothers and their counterparts of non-migrant parents is statistically significant.

The biggest difference among the groups of adolescents lies in their parents' marital history. On average, 10.4% of adolescents have parents who have divorced. Among non-left-behind children and children left behind by their fathers, 5.3% of them have parents who have divorced. However, it is the high incidence of marital dissolution among children whose mother or both parents have migrated that raised the average level of percent parents divorced. For children whose mother migrated and for children whose parents both migrated, 18.5% and 18.3% of their parents have divorced respectively.

What I observed about a potential relationship between divorce and labor migration in my fieldwork data is no isolated phenomenon. Divorce rate has been increasing rapidly among migrant populations in China; the association between labor migration and marital dissolution has been speculated in media reports.[30] However, the impact of labor migration on the marital life of migrant workers has received only limited attention from social researchers (Shu 2007; Wang and Ouyang 2012). It is often discovered in literature on divorce and child development that children of

[30] See media report: "Chinese migrant workers experience divorce epidemic" from http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20120303000002&cid=1503; "Migrant worker life hard on marriages" from http://www.chinadaily.com.cn/china/2011-05/06/content_12455041.htm, accessed on May 24, 2014.

divorced parents fare worse than those from intact families in various aspects of life including psychological wellbeing and academic achievements (Amato and Keith 1991; Amato and Cheadle 2005; Cherlin et al. 1998; MacLanahan and Sandefur 1994). The hypothetical effect of labor migration on marital stability could serve as a potential channel through which parental labor migration impacts children's wellbeing in rural China. This will be explored in this dissertation through structural equation modeling and analysis of qualitative data.

Chapter 6 Multivariate Analyses

The goal of this chapter is to present the results of multivariate analyses examining the effects of parental labor migration on adolescents' academic performance and transition to high school, and how these effects are transmitted in a migrant-sending community of central China. The first section presents the results regarding the effects of parental migration on mediating variables. The second section then demonstrates the effects of parental migration mediated through different channels and the remaining direct effects of it on educational outcomes, as well as the role of school and gender in adolescents' transition to high school. This is followed by a summary and discussion of the main findings.

6.1 The Effects of Parental Migration on Mediating Variables

According to Baron and Kenny (1986), to test for mediation, one should first estimate whether the independent variable affects the mediator. This section explores whether the type of parental migration status has any effect on the mediating variables—namely, economic resources and study environment at home, depressive symptoms, caregiver's involvement in study, dedication to study, education value, and parental divorce.

6.1.1 Economic Resources and Study Environment at Home

To examine whether parental migration increases parental income and improves family's wealth status, multivariate analyses were conducted to control for various covariates. The first nine sets of models in Table 6.1 present the Ordinary Least Squares (OLS) regression models on father's monthly income and mother's monthly income, both measured on a 1–10 scale, and logistic regression models on having a computer at home or not. Three hierarchical models are presented separately

for each of the three dependent variables. Model A includes only measures of parental labor migration to examine the gross effects of parental migration on parental monthly income and family computer ownership status. Model B adjusts for child characteristics and parental age, marital history, and education status. Model C further adjusts for potential school/neighborhood heterogeneity.

The general pattern is that mother's labor out-migration significantly increases mother's monthly income, and father's labor out-migration seems to be negatively related to mother's monthly income (Models 2A, 2B and 2C). Children from mother-migrant and parents-migrant families reported significantly higher level of mother's monthly income by 0.47 and 0.82 units respectively, and children from father-migrant families reported lower level by 0.43 units, compared with those who stayed with both parents. However, father's labor out-migration seems to make no significant difference in father's monthly income (Models 1A, 1B and 1C).

The likelihood of having a computer at home does not differ significantly among the four types of parental migration, as Models 3A–3C present. In other words, parental labor migration does not appear to improve family wealth status as measured by computer ownership. The relationship might be easily reversed, however; it is possible that migrant families are disadvantaged in terms of family wealth status from the beginning, compared to non-migrant families. Migrant fathers and mothers may continue to do migrant work for an extended period of time as long as there is need to do things like repay debts, pay for medical expenses, build or maintain a house, and fund a child's education.

Table 6.1 OLS Regression Models on Economic Resources and Logistic Regression Models on Home Study Environment (imputed data (N=380))

	Father's monthly income (1-10)			**Mother's monthly income (1-10)**		
	Model 1A	Model 1B	Model 1C	Model 2A	Model 2B	Model 2C
Non-migrant (Reference group)						
Father-migrant	0.41	0.44	0.42	-0.38+	-0.38+	-0.43+
	(0.31)	(0.31)	(0.32)	(0.23)	(0.23)	(0.23)
Mother-migrant	-0.01	0.01	-0.01	0.64*	0.57+	0.47
	(0.36)	(0.36)	(0.36)	(0.29)	(0.30)	(0.30)
Parents-migrant	0.45	0.44	0.38	0.89***	0.86**	0.82**
	(0.29)	(0.31)	(0.31)	(0.25)	(0.26)	(0.27)
	Having a computer at home (=1) (Odds Ratios)			**Having more than a few books at home (=1) (Odds Ratios)**		
	Model 3A	Model 3B	Model 3C	Model 4A	Model 4B	Model 4C
Non-migrant (Reference group)						
Father-migrant	0.71	0.72	0.84	0.78	0.81	0.87
	(0.20)	(0.21)	(0.26)	(0.24)	(0.26)	(0.29)
Mother-migrant	0.67	0.59	0.77	0.55+	0.65	0.73
	(0.22)	(0.21)	(0.28)	(0.18)	(0.24)	(0.29)
Parents-migrant	0.82	0.87	1.11	0.52*	0.57+	0.64
	(0.22)	(0.27)	(0.37)	(0.14)	(0.17)	(0.20)

Note: Model 1A, 2A, 3A and 4A include three parental migration dummies only; each of Models 1B, 2B, 3B, and 4B adjusts for child's age and gender, number of siblings, parental marital status; additionally, Model 1B adjusts for father's education and age and Model 2B adjusts for mother's education and age; Model 3B adjusts for both father's and mother's age, education, and monthly income; Model 4B adjusts for both father's and mother's education and monthly income, and family computer ownership; in addition to all covariates in Model B, Models 1C, 2C, 3C and 4C further adjust for school dummies.
Standard errors in parentheses.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

It is worth noting that having a female child is negatively related to father's monthly income (not presented in the table). This might suggest the persistence of son preference in rural China in particular, where sons are valued more than daughters both economically and culturally. Traditionally, upon marriage, a daughter is considered lost to her natal family because she begins to reside with her husband's family and provides elderly care and support for parents-in-law there. Furthermore, unlike sons, daughters are not considered to be legitimate descendants to carry on the family line. Thus, fathers of daughters who have a strong preference for a son might

be less willing to devote time and energy to working hard and earning more money for a daughter's education. Below are two quotes from my interview data: one from Fang's maternal grandmother, who basically brought Fang up alone, and the other from Fang's migrant mother.

> *My son-in-law prefers boy to girl. He said, 'what's the point of working a lot? Even if I work a lot, there is no one to give [what I have earned] to.' He simply does not bother to be active [in working hard and earning more money]. (Fang's maternal grandmother)*

> *Because [we] have two girls, my husband is not happy. As parents, everybody wants one son and one daughter. But this does not work in the way you want it to. So since we have two girls, he does not care much about earning money. (Fang's migrant mother)*

In the final set of models (Models 4A–4C) presented in Table 6.2, I test whether parental migration leads to improvement in study environment at home for adolescents. Similarly, Model A shows the gross effects of parental migration on home study environment; Model B controls for child characteristics, family background, parental monthly income, and family computer ownership; and Model C further includes school/neighborhood fixed effects.

Contrary to Hypothesis 2a, we see from Models 4A and 4B that the odds of having more than a few books at home for children from migrant families seem to be about 19–43% smaller than those for non-left-behind children. However, in Model 4C, when school/neighborhood heterogeneity is controlled for, the differences in odds of book availability at home among the four groups of children become insignificant. The disappearance of the effect of parental migration on the availability of books at

home could be a reflection of school/neighborhood effect. For example, the county town provides much greater access to bookstores and other cultural resources than the town and the township, which have a higher proportion of children left behind by parents. Thus it is possible that bookstore accessibility accounts for the initially observed difference in the likelihood of having more than a few books at home by parental labor migration.

Overall, the first part of Hypothesis 2a that parental migration increases family economic resources is supported to some extent, but the second part of Hypothesis 2a that parental migration improves book availability at home through increased economic resources is not supported. Indeed, family computer ownership is significantly positively associated with the number of books at home, but this positive effect cannot be attributed to parental labor migration. The regression results have failed to show that potential greater economic resources associated with parental labor migration are translated into greater book availability at home for left-behind children.

However, this finding does not mean that there are no economic benefits associated with parental labor migration. About 80% of caregivers indicated that parental labor migration has improved the family's economic situation. More specifically, both adolescents and caregivers frequently mentioned the beneficial effects of remittance, manifested as improvement in living conditions, payment for education costs, better study environment and education opportunities, and more financial resources for college education. Although I cannot demonstrate this effect of remittances quantitatively due to data limitations, there is little doubt that the economic resources of parents positively affect educational wellbeing of children, especially when both parents are migrants.

6.1.2 Depressive Symptoms

This study hypothesizes that the children of migrant parents report higher levels of depressive symptoms than the children of non-migrant parents. Based on Models 1A, 1B, and 1C presented in Table 6.2, this hypothesis is not supported. When the four-category measurement of parental labor migration is used, there are no gross effects of parental migration on the level of depressive symptoms and the coefficients remain statistically insignificant after controlling for child characteristics, family background, and school heterogeneity. Also notice that the magnitude of the coefficients is small (between -0.19 and 0.04), considering the scale (from 1 to 5) of depressive symptoms.

Table 6.2 OLS Regression Models on Depressive Symptoms, Caregiver's Involvement in Study, Education Value, and Dedication to Study (imputed data (N=380))

	Depressive Symptoms (1-5)			**Caregiver's Involvement in Study (1-6)**		
	Model 1A	Model 1B	Model 1C	Model 2A	Model 2B	Model 2C
Non-migrant (Ref.)						
Father-migrant	-0.07	-0.09	-0.11	-0.04	-0.06	-0.01
	(0.10)	(0.10)	(0.10)	(0.14)	(0.14)	(0.14)
Mother-migrant	0.10	0.08	0.06	-0.15	-0.13	-0.05
	(0.13)	(0.12)	(0.12)	(0.17)	(0.18)	(0.18)
Parents-migrant	0.05	-0.01	-0.03	-0.56***	-0.53***	-0.44**
	(0.10)	(0.11)	(0.11)	(0.14)	(0.15)	(0.15)
	Dedication to Study (1-5)			**Education Value (1-4)**		
	Model 3A	Model 3B	Model 3C	Model 4A	Model 4B	Model 4C
Non-migrant (Ref.)						
Father-migrant	-0.23*	-0.23*	-0.19+	0.14	0.18+	0.20*
	(0.11)	(0.10)	(0.11)	(0.10)	(0.10)	(0.10)
Mother-migrant	-0.30*	-0.21+	-0.14	-0.20+	-0.11	-0.08
	(0.13)	(0.12)	(0.13)	(0.12)	(0.11)	(0.11)
Parents-migrant	-0.05	-0.02	0.04	0.04	0.15	0.18+
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)

Model 1A, 2A, 3A, and 4A include three parental migration dummies only; Model 1B, 2B, 3B, and 4B adjust for child's age and gender, number of siblings the child has, parental marital status, father's education, mother's education, father's monthly income, mother's monthly income, and family's computer ownership; Model 1C, 2C, 3C, and 4C further adjust for school effects.
Standard errors in parentheses.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

However, additional analysis shows that the accumulated length of mother-child separation is significantly positively associated with the level of depressive symptoms of the child, even in the full model with all the control variables; whereas the accumulated length of father-child separation seems to have no effect on the level of depressive symptoms.

This finding has two implications: first, simple categorical measurement of parental labor migration may fail to capture the emotional burden caused by long-term parent-child separation for children who are left behind. It is important to take into consideration the parental migration history when we try to understand the impact of parental migration on children's lives. Second, mother-child separation may be more detrimental to children's psychological wellbeing than father-child separation, given that mothers are often viewed as the primary source of care.

Even though there is some negative impact of long-term mother-child separation on psychological wellbeing, the estimated results show that the magnitude of the effect is quite modest. To understand why this is the case, I conducted further analyses on parenting, parent-child bonding, and the frequency of parent-child communication.

Warmth, affection, and support perceived by adolescents regarding their parents' parenting style help to strengthen parent-child bonding and reduce depressive symptoms; while criticism, and verbal and physical punishment from parents weaken parent-child bonding and increase the level of depressive symptoms. Though parental labor migration reduces tension or conflict between parents and the child, it does not, at the same time, significantly affect the level of parental warmth and affection, as perceived by the child. Parental absence does weaken the bonding between parents and child, but at the same time, adolescents may feel decreased levels of parental

disapproval. These channels are working at the same time and in different directions, which may help to partially explain why we observe a modest detrimental total effect of parent-child separation on children's emotional wellbeing.

Table 6.3 shows some typical quotes from adolescents when they wrote about both good and bad things related to their parents' labor out-migration. As Asis (2006) commented on the experiences of left-behind children in the Philippines, parental migration creates an emotional burden for migrants and their children, but it also opens up space for the latter to practice independence, autonomy, and agency.

Table 6.3 Selected Quotes from Adolescents on Both Good and Bad Things about Parental Labor Migration, 2012–2013 Fieldwork

	Upsides	Downsides
Subject 1	"They are not at home, I have more freedom."	"They are not at home supervising me."
Subject 2	"I can do things I like."	"I feel lonely."
Subject 3	"I will not be criticized by parents."	"Can't see parents often."
Subject 4	"Unrestricted, no nagging from parents every day."	"No feeling of happiness."
Subject 5	"Father is too strict with me; I do not want him to be at home."	
Subject 6	"I become more independent, I can take care of myself."	"No one to talk to about how I feel."

For their part, migrant parents do not just passively accept the fact of being away from their children; rather, they make efforts to maintain contact with their children. My analyses further show that frequent phone calls made by migrant parents to adolescents strengthen the bonding between father and child, and between mother and child. This may help to alleviate the negative impact of parental absence on adolescents' emotional wellbeing. Furthermore, in societies where labor migration has been so salient in daily life, normalization of split-household arrangements and separation between family members may provide some protection for the

psychological wellbeing of left-behind children (Graham and Jordan 2011). Overall, hypothesis 3a is not supported.

6.1.3 Caregiver's involvement in study and adolescent's dedication to study

Parental labor out-migration often leaves children to the care of one remaining parent or grandparents. The absence of one or two parents may lead to a decrease in care and supervision received by children, because the remaining parent or elderly grandparents need to divide their time among care and supervision for children, household work, farm labor, and formal or informal job if they are holding any.

Models 2A–2C presented in Table 6.2 are conducted to test the hypothesized negative association between parental labor migration and caregiver's involvement in study. The results clearly indicate that the level of caregiver's involvement in study for adolescents from both-parents-away families is significantly lower than that for non-left-behind adolescents by 0.44 units, while adolescents from father-migrant families and mother-migrant families do not differ from non-left-behind counterparts in this aspect. Hypothesis 4a is partially supported.

Caregivers for children left behind by both parents are usually grandparents, who are likely to be less involved in children's schooling, due to their lower level of education, seniority in age and worse physical condition compared to parents. Below is an excerpt from my interview with Hai's 65-year-old left-behind grandmother.

Researcher: Do you often contact his teachers?

Grandmother: No, I don't contact any of them.

Researcher: Have you been to the school to ask teachers about how he is doing in school?

Grandmother: I haven't asked about him. I myself am illiterate. I do not know how. I have no idea about his studying, whether he is doing good or bad.

Even when grandparents are relatively better educated and thus are more capable of getting involved with children's school life, they might hold back because of weakening stamina and worsening physical health. Fang's grandmother was 67 years old, a former Minban ("民办", people-managed or community-hired) primary school teacher, and has brought up 9 grandchildren alone for her migrant sons and daughters in a span of about 20 years. She has developed gallstone, coronary artery heart disease and high blood pressure. She frankly told me that she has no interest in hearing her youngest granddaughter talking about her school life or taking a walk with her. Fang also remarked that her grandmother does not concern herself much with her study.

Another constraining or enabling factor is economic security. Besides her physical condition, another reason for limited involvement that emerged in Fang's grandmother's narrative is financial stress due to insufficient remittance. On the contrary, another respondent, Shuang's father is earning a very good income with his managerial job and his left-behind parents and daughter are well supported. Shuang's 63 years old grandfather was highly involved with her school life and used to ride a motorbike dropping her off at school and picking her up after school every day. Here is a quote from her talking about her grandfather as the most influential person in her life.

> *Since I was a child, it is him who has been taking care of me. Whatever issue there is in school, he deals with it. When I was in primary school, it was him who dropped me off at school and picked me up from school. It was still the case in middle school. He was worried that I would be home late, so he rode his motorbike to pick me up. Even in the evenings, he said he would come to pick me up. I would not let him. I said it's ok for me to walk back home. After*

all he is becoming older, I feel worried about him riding a motorbike. Since I was a child, he keeps talking to me while we are eating meals, seated around dining table. He always tells me something, about his earlier life, about books he read before, about some hows and whys in life. It has always been like this since I was young. No matter what happens, when I return home from school, he keeps telling me things and talking to me. I also tell him what happens in school. After I tell him, he will take care of the issues that need to be dealt with. He is very patient listening to me and he listens with full attention. (Shuang, girl)

The case of Shuang's grandfather, however, is not very common. In most cases, grandparents lack in knowledge, financial resources, physical energy or authority to participate in their grandchildren's daily lives in an active and effective way.

When it comes to dedication to study, adolescents from migrant families seem to be less devoted to schoolwork than their counterparts from non-migrant families, based on results of Models 3A and 3B. Nevertheless, after controlling for child characteristics, family background and the location of school, both magnitude and significance level of the coefficients of father-migrant and mother-migrant reduced in Model 3C. Hypothesis 5a is only weakly supported.

Further analysis shows that the level of depressive symptoms and educational value are both significant predictors of dedication to study. Adolescents with higher level of depressive symptoms also have lower level of commitment to schoolwork, and those with stronger education value have higher level of dedication to study, while caregiver's involvement in study is surprisingly not associated with dedication to study.

6.1.4 Social Remittance: Education Value

Regarding the role of social remittance, I hypothesized that adolescents from migrant families have stronger values regarding education compared to their counterparts from non-migrant families. The last three models presented in the second half of Table 6.2 help me to test this hypothesis.

In Model 4A, bivariate association suggests that adolescents of migrant parents do not differ from their counterparts with regard to educational value. In Models 4B and 4C, however, when child characteristics, family background, and school/community heterogeneity are adjusted for, the significant and positive coefficients of father-migrant and parents-migrant indicate that adolescent children of migrant fathers and migrant parents do have stronger value towards education than those of non-migrant parents. This is consistent with hypothesis 6a. Nevertheless, the magnitude of the coefficients—0.18 for parents-migrant and 0.20 for father-migrant—is modest.

Interestingly, we see from Models 4A–4C that adolescents of migrant mothers are not different from adolescents of non-migrant parents in education value. Also, notice that the difference in education value among different groups of adolescents is quite modest. This may reflect differences in parents' experiences and perceptions regarding the value of education. Specifically, some parents may perceive education as highly positively related to job security and advancement, but other parents may come to the realization that formal schooling does not guarantee economic prosperity, and that success often relies on skills and experience that formal schooling cannot offer.

When migrant workers are situated in work environments where they interact daily with people with more education and higher pay, they tend to attribute their relative disadvantage to their lack of formal qualifications, thus emphasizing the

importance of education. For example, Wang's mother, who did not finish vocational high school and now works in a pharmacy in Shanghai had this to say:

> *I did several migrant jobs. In the drug store I now work, my colleagues are all college or junior college graduates. I have the lowest educational qualification. If you want to take the licensed Traditional Chinese Medicine Pharmacist Examination, you have to have at least junior college diploma. When I got this job, I felt too ashamed to admit that I only graduated from middle school. (Wang's mother)*

As a result, Wang's mother sees her daughter's education as very important and is quite committed to supervising it:

> *I keep telling her to study hard. We have limited education, we have no culture, [and thus] our jobs are not very good. Those people who have culture do an easy job and still earn a good salary. (Wang's mother)*

Wang confirmed her mother's role in her schooling by telling stories about her mother checking homework and contacting her teacher, and how her math scores improved as a result. Wang seems to have internalized her parents' values:

> *She (her mother) hopes that I will have a better future. I don't know how to put this, sometimes my dad purposely jokes with me that, if I do not study well, then do migrant job. I think migrant work, I heard from them that it's very very hard; I think I probably could not bear it, I'd better study hard. (Wang, girl)*

How successful parents transmit their education values to children also depends on other factors, such as the role models available to the children, the feasibility of pursuing higher education, the quality of parent-child bonding, and so on. Almost all the parents I spoke to emphasized that obtaining more years of schooling is

very important to their children's future, but if the education path does not work out because their children have lost interest in studying and/or are not doing well academically, then one must be pragmatic and plan for alternatives.

In Ling's case, his father used to work as a delivery driver and his stepmother was working at a bakery before they returned home to build a new house. As Ling continuously did poorly in school, his father even started asking him to stop going to school. Here is a quote from Ling:

> *My dad knows that I am not interested in studying. [These days] he keeps asking me what I want to do after finishing Grade 9. I don't have any idea. Whatever he says, [I will] just follow. He said he wants to open a bakery store at home. He said I could ride a bike and help him to do delivery. I also think in this way, [I will] learn how to make cakes, do delivery, and acquire his skills. (Ling, boy)*

6.1.5 Parental Migration and Parental Divorce

A majority of studies have found adverse effects of parental divorce on children's development (Amato and Keith 1991; Kim 2011; MacLanahan and Sandefur 1994; Manning and Lamb 2003). Divorce sometimes overlaps with labor out-migration. In the case of China's internal labor migration and spousal separation, we see that for a substantial amount of time during their married life, husbands and wives live apart from each other in drastically different settings. To what extent is parental migration associated with divorce as well? What is the combined impact of parental migration and divorce on children's wellbeing? The link between parental migration and divorce is another potential channel explored in this research.

Table 6.4 explores the association between parental migration and divorce by conducting a series of multivariate logistic regressions. Model 1 shows the results of

bivariate association between parental migration and divorce history, without adjusting for any other factor. Adolescents from mother-migrant and parents-migrant families are 4.3–4.8 times more likely to be in divorced or step-families than their counterparts of non-migrant parents, while adolescents of father-migrants have the same likelihood. These associations remain unchanged in Model 2 when I controlled for child's gender, both father's and mother's educational attainment, and were again unchanged in Model 3 when I further adjusted for the potential confounding effects of school/neighborhood. Hypothesis 7a is, therefore, supported.

It is possible that parental divorce might lead to parental migration rather than the other way around. For example, after the marital relationship falls apart, one party or both parties may turn to labor out-migration as a solution to the difficult situation or a way to start a new life. Taking this possibility of the reverse causal relationship into consideration, I checked the relative timing of parental migration and divorce. Among those cases with available information, the onset of parental migration was prior to parental divorce for a great majority. When I excluded the cases in which parental migration occurred after the parental divorce, the patterns reported in Table 6.4 remained unchanged. Again, when I only included the cases in which the onset of parental migration was prior to parental divorce in the analysis, I obtained similar results.

However, these robustness checks are not able to deal with the issue of selectivity. It could be that an omitted third variable, for example, marital problems and conflicts, drives both marital dissolution and labor out-migration. The information I have simply does not allow me to delineate a detailed process of the development of parental migration and marital relationship. I cannot claim that

parental migration leads to divorce; instead, I can only highlight the significant and strong association between the two.

Table 6.4 Logistic Regression Models on Parental Divorce History (imputed data (N=382))

	Model 1		Model 2		Model 3	
Non-migrant (Reference group)	Log odds	Odds ratios	Log odds	Odds ratios	Log odds	Odds ratios
Father-migrant	0.04	1.04	0.11	1.12	0.19	1.21
	(0.63)	(0.65)	(0.65)	(0.73)	(0.66)	(0.80)
Mother-migrant	1.35**	3.87**	1.31*	3.72*	1.45**	4.27**
	(0.51)	(1.96)	(0.52)	(1.94)	(0.53)	(2.24)
Parents-migrant	1.39**	4.00**	1.48**	4.38**	1.57***	4.81***
	(0.45)	(1.79)	(0.46)	(1.99)	(0.47)	(2.25)

Model 2 adjusts for child's gender, father's education and mother's education; Model 3 further adjusts for potential school/community heterogeneity.
Standard errors in parentheses.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

My qualitative data also point to the association between parental labor migration and marital dissolution. In the case of Tian, her mother has been doing migrant work since Tian was less than one year old. When Tian was about two or three years old, her parents got divorced. She reflects on the situation now:

> *But I don't go to [maternal] grandma's home often, because the reason my parents got divorced is that, my mom, um, she found an uncle [new partner] outside [Tongcheng county]. So I know every time I visit my [maternal] grandma, my dad actually minds, though he said he does not mind. (Tian, girl)*

In another case, Zhou's mother returned home from migrant work to take care of him when he was in Grade 7, while his father continued doing migrant work. Based on the two quotes below from Zhou and his grandfather, his parents apparently experienced marital crisis during the period when they were separated from each other and this led to their eventual divorce:

They used to work in the same place; they started to work in different places since this year…My mom was taking care of me at home. Last year, my parents were having problems and they divorced, sort of. (Zhou, boy)

She likes to play mahjong/cards. Some guys often came to pick her up to play. My son was not happy. They divorced last year. (Zhou's grandfather)

6.1.6 A Summary of the Findings on the Associations between Parental Migration and Mediating Variables

Section 6.1 has examined the associations between parental migration and the mediating variables. To summarize, both quantitative and qualitative data seem to suggest that parental migration increases family economic resources, but does not necessarily improve the availability of books at home. Secondly, surprisingly, there is no significant difference in depressive symptoms by parental migration status, but this is consistent with the findings of other researchers using nationally representative samples (Ren and Treiman 2013; Xu and Xie 2013).

There is some evidence suggesting that adolescents left behind by both parents received lower levels of caregiver involvement in study, that adolescents left behind by fathers or mothers were less dedicated to schoolwork, and that adolescents left behind by fathers or both parents scored higher on the scale of education value all when compared to their non-left-behind counterparts.

However, parental migration is found to be strongly associated with parental divorce. Adolescents of migrant mothers and parents are more than four times more likely to be in divorced or step-families, compared with their non-left-behind counterparts.

6.2 The Effects of Parental Migration on Educational Outcomes

In this section, I present the effects of parental labor migration on academic performance and the outcome of transition to high school. I further test whether the mediating variables carry a part of the effects of the independent variable on the dependent variables. I use Chinese and Math test scores, each with a full mark of 120 points, to measure adolescents' academic performance. For the outcome of transition to high school, I use the following three categories: leaving school, going to vocational high school, and going to academic high school.

6.2.1 The Effects of Parental Migration on Chinese and Math test scores

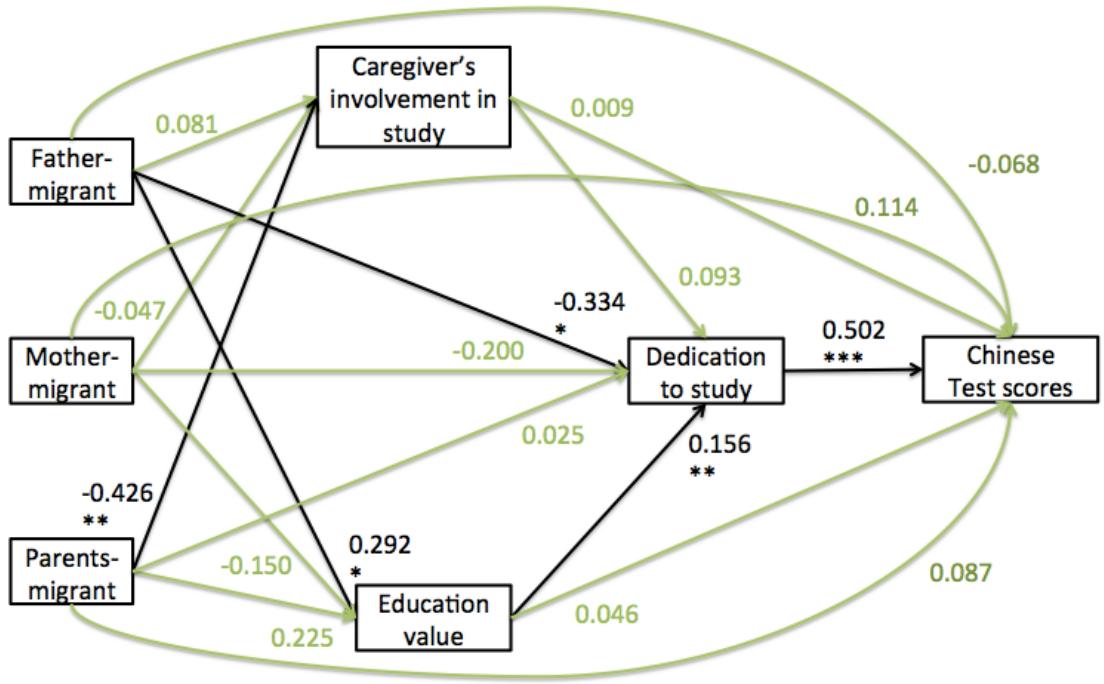
To test the hypotheses about the direct and indirect effects of parental migration on academic performance, I used Structural Equation Modeling (SEM). As former sections have shown, there is no significant difference in book availability at home and the level of depressive symptoms between non-left-behind children and children left behind by migrant fathers, migrant mothers, and migrant parents. Furthermore, multivariate OLS regression analyses show no support for the mediation effect of book availability at home and the level of depressive symptoms. For purposes of parsimony, I excluded book availability at home and depressive symptoms in the following path analysis.

Hu and Bentler (1999) recommended a value close to .95 for comparative fit index (CFI) and Tucker-Lewis Index (TLI) and a value close to .06 for root mean square error of approximation (RMSEA) as cutoff criteria to evaluate model fit. According to these widely used criteria, the models for Chinese language and math test scores (see Figures 6.1 and 6.2) fit the data well. The fit indicators are CFI=1.000, TLI=1.131, and RMSEA=0.000 for the path model on Chinese test scores and CFI=1.000, TLI=1.170, and RMSEA=0.000 for the path model on math test scores.

Caregiver's involvement in study does not have significant direct or indirect effect on academic performance. Therefore, although adolescents from parents-migrant families have lower level of caregiver involvement in study (standardized coefficient=-0.426, $p<0.01$), there is no significant indirect effect of parental migration on academic performance through this pathway (see Table 6.6).

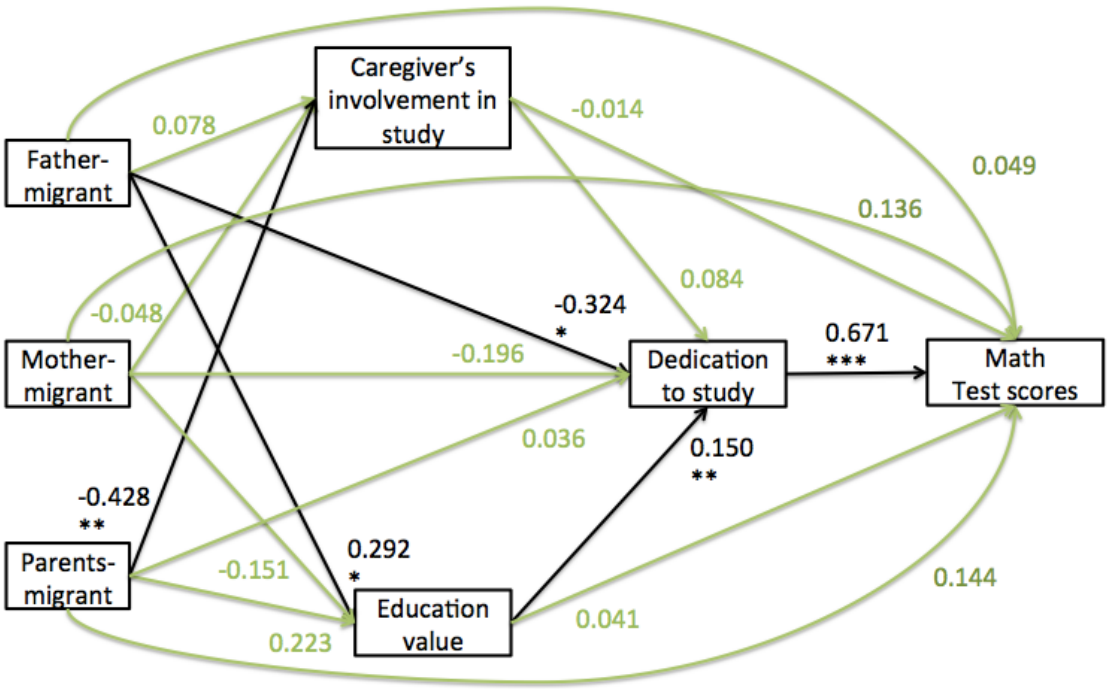
Among the three mediating variables examined in the model, dedication to study has a direct and significant effect on both Chinese test scores (standardized coefficient=0.502, $p<0.001$) and Math test scores (standardized coefficient=0.671, $p<0.001$). Adolescent's education value has no direct effect on academic performance, but it does have an indirect effect through dedication to study.

Father's migration has a direct positive effect on education value (standardized coefficient=0.292, $p<0.05$) and a direct negative effect on dedication to study (standardized coefficient=-0.324, $p<0.05$). However, the effects of mother's migration and parents' migration on education value and dedication to study are not statistically significant.



Standardized coefficients, + p<0.1; * p<0.05; ** p<0.01; *** p<0.001.
Controlled for gender, age, sibling size, father's education, parental marital status, family wealth status, and location of school.
Model fit information: N=351; Chi-Square=0.090, df=1, p=0.7642; RMSEA=0.000; CFI=1.000; TLI=1.131

Figure 6.1 Path Diagram of the Effect of Parental Migration on Chinese Test Scores



Standardized coefficients, + p<0.1; * p<0.05; ** p<0.01; *** p<0.001.
Controlled for gender, age, sibling size, father's education, parental marital status, family wealth status, and location of school.
Model fit information: N=351; Chi-Square=0.103, df=1, p=0.7486; RMSEA=0.000; CFI=1.000; TLI=1.170

Figure 6.2 Path Diagram of the Effect of Parental Migration on Math Test Scores

We see from Table 6.5 that father's migration has a negative indirect effect on Chinese test scores (standardized indirect effect coefficient=-0.168, p<0.05) and math test scores (standardized indirect effect coefficient=-0.217, p<0.05) through dedication to study, and a marginally significant positive indirect effect on Chinese test scores (standardized indirect effect coefficient=0.023, p<0.1) and math test scores (standardized indirect effect coefficient=0.029, p<0.1) through education value and dedication to study.

Table 6.5 Standardized total, total indirect, specific indirect, and direct effects of parental migration on Chinese and Math test scores (corresponding to Figure 6.1 and Figure 6.2)

	Chinese test scores			**Math test scores**		
	Father-migrant	Mother-migrant	Parents-migrant	Father-migrant	Mother-migrant	Parents-migrant
Total	-0.195	-0.008	0.104	-0.124	-0.019	0.182
Direct	-0.068	0.114	0.017	0.049	0.136	0.144
Total indirect	-0.127+	-0.122	0.087	-0.173+	-0.155	0.038
Via caregiver's involvement in study	0.001	0.000	-0.004	-0.001	0.001	0.006
Via dedication to study	-0.168*	-0.100	0.012	-0.217*	-0.132	0.024
Via education value	0.013	-0.007	0.010	0.012	-0.006	0.009
Via involvement-dedication	0.004	-0.002	-0.020	0.004	-0.003	-0.024
Via value-dedication	0.023+	-0.012	0.018	0.029+	-0.015	0.022

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Taken as a whole, path analysis results lend some support to the overall negative effect of parental migration on academic performance and the mediation effect of dedication to study between parental migration and academic performance.

Hypotheses about the mediating effects of home study environment, caregiver's involvement, and depressive symptoms are not supported. Moreover, it is worth noting that the total effect of parental migration on adolescent's academic performance is very limited. Adolescents from father-migrant families and mother-migrant families scored lower than non-left-behind adolescents in Chinese by 0.195, 0.008 standard deviations, and lower in Math by 0.124, 0.019 standard deviations respectively. Moreover, adolescents left behind by both parents did not score lower than non-left-behind adolescents.

In the following section, I turn to the key outcome variable of this research—outcome of transition to high school.

6.2.2 The Effect of Parental Migration on Transitioning Outcome

To test the effect of parental migration on the outcome of adolescents' transition to high school and the potential mediating effects of book availability at home, depressive symptoms, education value, and parental divorce, I conducted hierarchical multinomial logistic regressions and presented the results in Table 6.6. Model 1 only controls for Chinese and Math test scores. Model 2 adds all four mediating variables; Model 3 further adjusts for potential confounding child and family factors; and Model 4, the full model, takes into account school/neighborhood heterogeneity.

To enter a certain type of high school, adolescents need to pass a corresponding threshold in the High School Entrance Exam. The thresholds for academic high schools are much higher than those for vocational high schools. Test scores are the most prominent predictor of the transitioning outcome from middle school to high school. The baseline model (Model 1) and all the other models are adjusted for Chinese and Math test scores in order to examine the remaining effect of

parental migration and mediating variables on the outcome of transition to high school that are not transmitted through academic performance.

The associations in Model 1 show the gross effects of parental migration and mediating variables on transitioning outcome, after taking into account Chinese and Math test scores. For adolescents from parents-migrant families, the odds of leaving school instead of going to academic high school are 2.63 times larger than the odds for those from non-migrant families; for adolescents from father-migrant and mother-migrant families, the odds of going to vocational high school relative to going to academic one are 2.36 and 3.02 times larger than the odds for those from non-migrant families. Hypothesis 1b is partially supported.

Home environment conducive to learning might have an accumulative effect in terms of cultivating adolescents' interest in pursuing education over the long run. Moreover, investing more resources to buy books also signals parents' commitment to children's education. The results show that having more than a few books at home decreases the odds of leaving school relative to going to academic high school by a factor of 0.40. This beneficial effect of book availability at home on educational outcome remains when child characteristics, family background and school effects are taken into account (models 3-4). But book availability at home does not seem to matter (Odds Ratios=0.89, $p>0.1$) with regard to which type of high school adolescents go to when we adjust for the potential confounding factors.

The same story applies to depressive symptoms. Depressive symptoms have a direct and independent effect on transitioning outcome when it comes to whether to pursue further education or not. This holds even after the child and family characteristics, location of school, and other potential mediating pathways are taken into consideration (see Models 2–4). One additional score on depressive symptoms

increases the odds of leaving school relative to going to academic high school by 76–114%. However, depressive symptoms do not have an effect (Odds Ratios=1.42, p>0.1) on the type of high school adolescents attend.

In contrast, education value does matter when adolescents and their families are deciding which type of high school they go to. One unit of increase in education value decreases the odds of going to vocational high school instead of academic high school by a factor of 0.59. But education value has a less significant effect on the odds of leaving school relative to going to academic high school (Odds Ratios=0.87, p>0.1), especially after controlling for other confounding factors and mediating variables.

Parental divorce is shown to have a significant negative effect on adolescent's transitioning outcome across models when controls are gradually adjusted for. For those whose parents have divorced, the odds of leaving school relative to going to academic high school and the odds of going to vocational high school instead of academic high school are 6.79 times and 3.00 times, respectively, larger than the odds for those whose parents have stayed married.

When it comes to the mediating effect of those variables on educational outcome, there is no evidence suggesting that book availability at home or depressive symptoms helps to explain the gross effects of parental migration. This is because parental migration has no effect on book availability or depressive symptoms, which means that the first step in establishing a mediation effect does not hold.

As to education value and parental divorce, we have established the relationship between parental migration and the two in the first section of this chapter. In Table 6.6, I have shown that parental migration, education value, and parental divorce have significant impact on adolescents' transitioning outcome. Now the

question is whether the effect of parental migration on transitioning outcome is transmitted through education value and parental divorce.

Table 6.6 Odds Ratios of Multinomial Logistic Regression Models on Transitioning Outcome (imputed data (N=380))

	Model 1 Test scores	**Model 2** Mediating variables	**Model 3** Child + Family controls	**Model 4** School controls
Leaving school (Academic high school=0)				
Parental migration				
Non-migrant (ref.)				
Father-migrant	0.75	0.77	1.01	0.72
	(0.44)	(0.48)	(0.71)	(0.52)
Mother-migrant	1.92	1.25	0.83	0.48
	(1.10)	(0.77)	(0.59)	(0.36)
Parents-migrant	2.63*	1.80	1.36	0.97
	(1.26)	(0.91)	(0.74)	(0.56)
Having more than a few books at home		0.34**	0.39+	0.40+
		(0.14)	(0.19)	(0.21)
Depressive symptoms		1.76*	2.12*	2.14*
		(0.48)	(0.65)	(0.69)
Education value		0.68	0.85	0.87
		(0.19)	(0.27)	(0.29)
Parental divorce		3.69*	4.98*	6.79*
		(2.33)	(3.70)	(5.15)
Female (male=0)			0.35+	0.34+
			(0.21)	(0.21)
Other child and family controls			YES	YES
School (County town school=0)				
Township school				1.18
				(0.84)
Town school				5.56**
				(3.20)
Vocational high school (Academic high school=0)				
Parental migration				
Non-migrant (ref.)				
Father-migrant	2.36*	2.79**	3.31**	2.77*
	(0.88)	(1.10)	(1.42)	(1.24)
Mother-migrant	3.02**	2.50*	2.55+	1.83
	(1.28)	(1.14)	(1.22)	(0.90)
Parents-migrant	1.87	1.54	1.25	0.81
	(0.76)	(0.65)	(0.56)	(0.38)
Having more than a few books at home		0.61	0.76	0.89
		(0.19)	(0.27)	(0.32)

Depressive symptoms	1.56*	1.46+	1.42
	(0.33)	(0.34)	(0.36)
Education value	0.61*	0.57*	0.59*
	(0.14)	(0.14)	(0.16)
Parental divorce	2.12	2.19	3.00*
	(1.04)	(1.13)	(1.46)
Female (male=0)		1.49	1.51
		(0.55)	(0.58)
Other child and family controls		YES	YES
School (County town school=0)			
Township school			4.78***
			(2.07)
Town school			7.32***
			(3.06)

Note: Model 1 only controls for Chinese language and math test scores; Model 2 adds mediating variables; Model 3 adjusts for child's gender and age, number of siblings the child has, father's education and mother's education, father's monthly income, mother's monthly income, and family's computer ownership; Model 4, the fully adjusted model, adds two school dummies.
Standard errors in parentheses.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

However, unlike in the linear regression models, it is problematic to directly compare the change of coefficients across nested nonlinear probability models and attribute the change to the inclusion of mediating variables. This is because the estimation of coefficients in a logit model is dependent on the error variance of the model, which is affected by the inclusion of other variables (Karlson et al. 2012). In other words, the coefficients of different models are measured on a different scale and, thus, are not directly comparable.

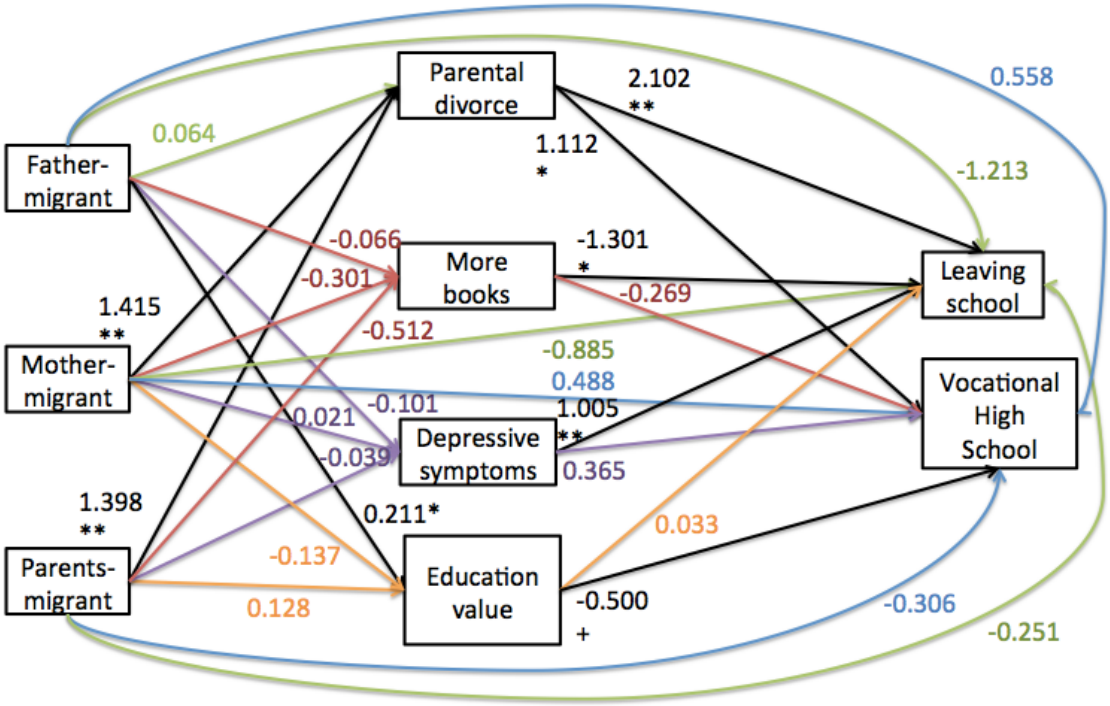
To deal with this issue and also as a robustness check, I conducted path analysis of the effect of parental migration on transitioning outcome through mediating variables (see Figure 6.3a, Figure 6.3b, and Table 6.7). Two models are presented: one full model including all four mediating variables examined in Table 6.6, and another smaller model focusing on education value and parental divorce as

pathways. Comparing the AIC and BIC values between these two models, the smaller model is favored.

The results shown in Figure 6.3a confirm what we learned from the multinomial logistic regression in Table 6.6. Although book availability at home and depressive symptoms have direct effects on transitioning outcome (leaving school versus going to academic high school), there is no significant indirect effect from parental migration to transitioning outcome through either of these two variables, largely due to a lack of the direct effect of parental migration on them.

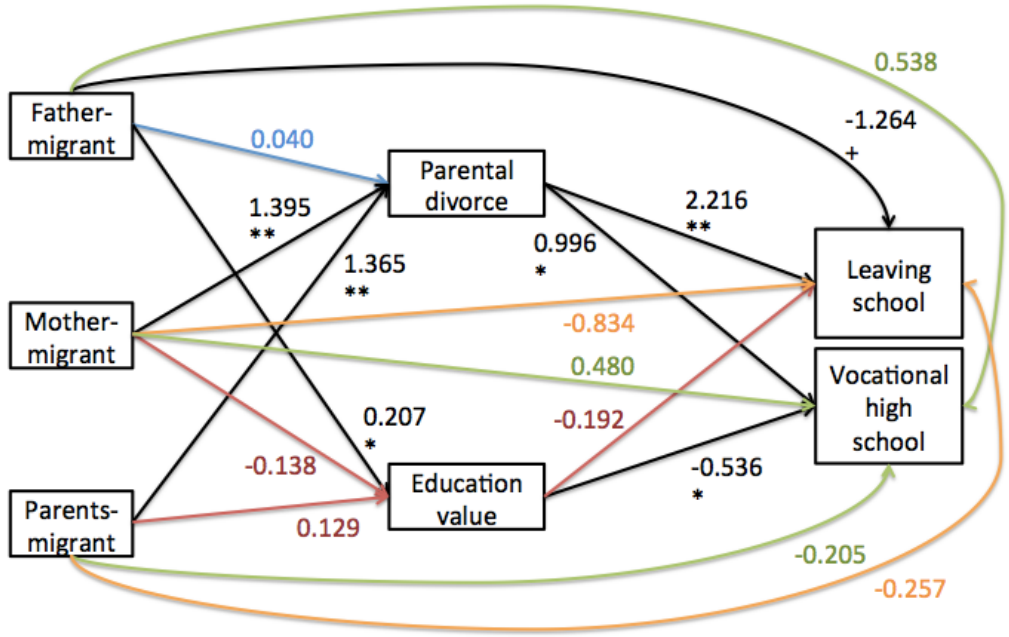
With regard to the other two mediating pathways (education value and parental divorce), I will now focus on Figure 6.3b, which depicts the path diagram of a smaller and better-fit model, and Table 6.8, which presents the results of the indirect pathways of the path model.

Consistent with what I presented with the multinomial logistic regressions, parental divorce has a significant direct effect on leaving school (unstandardized coefficient=2.216, $p<0.01$) and going to vocational high school (unstandardized coefficient=0.996, $p<0.05$), relative to going to academic high school. Education value has a significant direct effect on going to vocational high school relative to academic high school (unstandardized coefficient=-0.536, $p<0.05$).



Reference group of education outcome: academic high school. Controlled for Chinese and math test scores, gender, age, number of siblings, father's education, family wealth status, and school location.
Raw coefficients, + p<0.1; * p<0.05; ** p<0.01; *** p<0.001.
Model fit information: N=356, AIC=2628.911; BIC=2942.781; Sample-size adjusted BIC=2685.812

Figure 6.3a Path Diagram of the Effect of Parental Migration on Transitioning Outcome



Reference group of education outcome: academic high school. Controlled for Chinese and math test scores, gender, age, number of siblings, father's education, family wealth status, and school location.
Raw coefficients, + p<0.1; * p<0.05; ** p<0.01; *** p<0.001.
Model fit information: N=356, AIC=1432.742; BIC=1634.238; Sample-size adjusted BIC=1469.271

Figure 6.3b Path Diagram of the Effect of Parental Migration on Transitioning Outcome

On the other hand, mother's migration (unstandardized coefficient=1.395, $p<0.01$) and parents' migration (unstandardized coefficient=1.365, $p<0.01$) is positively associated with the risk of parental divorce. Father's migration is positively associated with education value (unstandardized coefficient=0.207, $p<0.05$).

Combining these results, as Table 6.7 shows, there is a significant indirect effect of mother's migration (unstandardized coefficient=3.091, $p<0.05$) and parents' migration (unstandardized coefficient=3.024, $p<0.05$) on the relative likelihood of discontinuing schooling (versus academic high school) and a marginally significant indirect effect of mother's migration (unstandardized coefficient=1.389, $p<0.1$) and parents' migration (unstandardized coefficient=1.358, $p<0.1$) on the relative likelihood of going to vocational high school instead of academic one. But education value is not a significant mediating variable between parental migration and transitioning outcome.

Table 6.7 Indirect Effect of Parental Migration on Transitioning Outcome (Unstandardized Coefficient) (Corresponding to the Model Presented in Figure 6.3b)

Parental migration	Through mediating pathway	Transitioning outcome (ref=academic high school)	Estimate	Standard error	Two-tailed P-value
Father-migrant	Parental divorce	Leaving school	0.09	1.453	0.951
		Vocational HS	0.04	0.652	0.951
Mother-migrant		Leaving school	3.091	1.525	0.043
		Vocational HS	1.389	0.811	0.087
Parents-migrant		Leaving school	3.024	1.476	0.04
		Vocational HS	1.358	0.78	0.082
Father-migrant	Education value	Leaving school	-0.04	0.073	0.585
		Vocational HS	-0.111	0.081	0.169
Mother-migrant		Leaving school	0.027	0.051	0.602
		Vocational HS	0.074	0.07	0.293
Parents-migrant		Leaving school	-0.025	0.047	0.599
		Vocational HS	-0.069	0.063	0.278

Overall, I found a significant negative effect of mother's migration and parents' migration on adolescents' transitioning outcome through increased risk of parental divorce. In other words, when parental migration is associated with parental divorce, children seem to be most disadvantaged in terms of educational opportunity. The significant and substantial effects of parental divorce on children's transitioning outcome presented here are also validated by the qualitative data.

Among thirty-eight adolescents I interviewed, two boys and one girl have biological parents who have been migrant workers and have divorced. It has been difficult and challenging for Tian (girl), Ling (boy) and Zhou (boy) to manage since their parents divorced. Tian and Zhou have both dropped out from school and become migrant workers, while Ling stopped pursuing further education. After his parents divorced about seven years ago, Ling gradually lost interest in studying and dropped out of school in his last semester of middle school.

As I mentioned earlier, Tian's parents divorced when she was still very young and her father remarried when she was in primary school. She feels resentful towards her biological mother and does not get along well with her stepmother, who she claims favors her half-siblings over her; Tian is not close to her father either:

> *My dad and I, (choking her tears back), we had nothing to say. I go home every Sunday, although sometimes I was alone with my dad, but most of these moments were filled with silence. Sometimes, if I don't talk to my dad [first], he will not talk to me. Sometimes, if my dad does not talk to me, I won't talk to him either. [And] that's it. Although I very much want to talk to him, but I am afraid that if I do and he won't talk back to me. Just like that. When I was young, I felt envious of my classmates so much, I felt envious of my classmates so much, because (choking her tears back) when it rained, it got cold, and it's*

their mom or dad who brought umbrella for them, but me, every time, it's my grandma. When I was in Grade 6, in the class beside mine, there was a boy with the surname Chen; he seemed to know my situation. He told schoolmates that my parents were divorced. For this, I got into a fight with him. He was short, and in the same grade as me. I beat him and blood came out from his nose. (Tian, girl)

According to her form teacher, Tian was not doing very well in class and became weary of studying. Tian dropped out of school at the beginning of her last semester in middle school and started her life as a migrant worker in a restaurant near the provincial city of Hubei Province.

Zhou also dropped out of school shortly after his last semester in middle school started. He then hopped between several jobs in different factories in Guangzhou and Dongguan, and was working as an apprentice worker in a paint factory in Suzhou when I last contacted him in June 2013. Regarding his new life, he made the following remark:

Only after I came out, I came to know that I was just thinking unrealistically before. I only thought that it was fun outside, it was easy earning money outside. Now I realize it is more tiring working outside than studying in school. Nevertheless, since I already came out, I do not want to go back. My heart has become wild; I am not very interested in studying. Besides, there is little hope of catching up. (Zhou, boy)

6.2.3 The Effects of Gender on Transitioning Outcome

Contrary to Hypothesis 9a, girls are not necessarily disadvantaged in terms of their transitioning outcome relative to boys. Based on the results of multinomial logistic regressions and path analysis (see Table 6.8), being female seems to be

negatively associated with the odds of leaving school instead of going to academic high school. Specifically, the odds of leaving school relative to going to academic high school is 66% (Odds Ratios=0.34, $p<0.1$, Table 6.6) lower for girls than for boys.

This finding is not surprising, as many studies have shown that girls have gained relatively more from the rapidly expanding access to education in China, and consequently gender disparities in primary, secondary, and tertiary education have declined over time (Hannum 1999; Hannum 2005; Hannum and Xie 1994; Hannum et al. 2010; Wu and Zhang 2010). The higher probability of leaving school for boys than girls is also found among Mexican adolescents from migrant households (Saucedo 2004).

Again, our understanding of this pattern is aided by the qualitative data. My interviews with teachers and adolescents suggest that many adolescents are weary of endless studying and dreary school routine, and not surprisingly, some of them engage in a variety of activities—passive presence in class (paying no attention to lectures or assignments), chatting or playing games on mobile phone, reading love stories, spending time in internet cafés—that are perceived as rebellious by the school and teachers. In particular, the teachers consistently bring up the gendered aspect of obedience and discipline. Teachers perceive girls to be more self-disciplined and willing to devote time and effort to study. One form teacher, Mu, talking about a boy in his class, made the following remarks:

> *If teachers become less strict in governing [him], he will be playing everywhere whenever he gets time, playing basketball and all that, [after all he is] a boy. (Mu, form teacher)*

Another form teacher, Zhuang, commented on the gender difference in the amount of effort given to studying and academic performance:

Why among the boys many are not studying, or fewer of them are studying? Because they are all playing…Less than one fifth of boys are studying. In our class, among twenty boys, only two, (name) and (name), are studying hard. Girls are better [in terms of working hard]. Last year, among four children admitted to the Olympic Class [at the best high school of the county], there was only one boy. Two years ago, five children [admitted to the Olympic Class] were all girls; none of them was boy. (Zhuang, form teacher)

It seems that the boys are more likely to be disengaged than girls, something that might help to explain the gender difference in the likelihood of leaving school, but more data is needed to test this potential explanation.

However, the results from this research also suggest that, with regard to the type of high school, being female seems to be positively related to the odds of going to vocational high school relative to an academic one. In other words, although girls might be more likely to remain in school than boys, they tend to enter vocational track rather than academic one. As I have discussed in earlier chapters, academic high school education is more expensive and signals long-term investment, and therefore, more risky. This might be a hint of the persistence of son preference in terms of long-term educational investment in rural China.

As to whether there is a gendered aspect of the influence of parental labor migration, additional analyses involving the interaction terms between gender and the type of parental migration show that parental migration does not affect girls and boys differently, refuting Hypothesis 9b.

6.2.4 The Effects of School on Transitioning Outcome

In addition to the familial forces affecting adolescents' transition to high school, school/neighborhood effects are also important. As Table 6.6 presents, after controlling for Chinese and Math test scores, individual characteristics and family background, for adolescents who studied in the town school, the odds of leaving school instead of going to academic high school are 5.56 times ($p<0.01$) larger than the odds for adolescents who studied in the county town school. Moreover, the odds of going to vocational high school instead of academic one for adolescents from the township school and the town school are 4.78 times ($p<0.001$) and 7.32 times ($p<0.001$), respectively, larger than the odds for those from the county town school. These patterns are confirmed by the results from path analysis in Table 6.8, supporting Hypothesis 10.

Table 6.8 Effects of Gender and Location of School on Transitioning Outcome (Unstandardized Coefficient) (Corresponding to the Model Presented in Figure 6.3b)

Variables be explained	Leaving school	Vocational HS
Variables used to explain		
Female (male=0)	-0.468	0.527
Township school (County town school=0)	0.660	1.715***
Town school (County town school=0)	1.856**	2.136***

+p<0.1; *p<0.05; **p<0.01; ***p<0.001.

These substantial school effects are likely to consist of both selectivity in terms of family characteristics—characteristics that are not captured by the family background variables used in this study—and the impact of school/neighborhood characteristics.

On the one hand, parents who care more about their children's education and who have access to greater financial capital and social capital are also more likely to enroll their children in the county town school—which is better equipped in terms of educational facilities and human resources than the township school and the town school—than their less fortunate counterparts. Given the economic costs and

institutional barriers of entering a school in the county town, the better-off and more devoted parents usually started preparing for their children's middle school education years before they reach middle school age. For example, Wang's parents bought an apartment in the county town while she was still in Grade Two. Here is a quote from her mother:

> *[We bought this apartment] in 2005. It is not very valuable. [The reason] why we bought this apartment is for Wang's education. Our families are [originally] in the countryside, [we just] want it to be convenient for her to go to school, so [we thought] about buying an apartment in the county town, this is convenient for her to go to primary school, middle school and high school. (Wang's migrant mother)*

Similarly, Long's parents believed that the schools in the county town are of better quality and they moved to the county town when Long started primary school, renting and living in several different residences over the years. Long told me that her family still keeps their house in the countryside and that her mother plans to move back when she starts high school, which is a boarding school.

In terms of the supervision of children's study, parents or other non-parent caregivers of adolescents from the county town school also scored higher on involvement in study than their counterparts of adolescents from the township school and the town school. On average, they are also better educated than their counterparts in the countryside, as I have shown in Chapter 5. Overall, at least part of the school differences in adolescents' educational outcomes is due to the gap in parental socioeconomic status and commitment to education. Better-off and highly committed parents are more likely to keep their children in school for a longer period of time and

ensure that they have access to an academic high school even if they fail the entrance exam.

The other side of the school effect on adolescents' academic performance and transition to high school lies in the differences in the quantity and quality of resources between the schools and neighborhoods. First of all, the county town school has richer resources and facilities than the town school and the township school. For example, the average number of school library books per students is about seven for the county town school, but less than two for the town school and the township school. Additionally, eight out of ten bookstores in Tongcheng County are concentrated in the county town, which is more accessible to the adolescents from the county town school than their counterparts in the countryside. In terms of teachers' qualifications, over 60% of the teachers at the county town school have college education, as compared to only about 36–39% of teachers at the township school and the town school. Presumably, adolescents studying in the county town school thus have greater access to educational resources than their rural counterparts and may achieve higher academically.

The gap in average monthly income of teachers between the urban school and the two rural schools is also notable. It is very difficult for me to calculate an accurate number of the average monthly income of the teachers because, first, when asked for this information, people provided only approximate numbers, and second, the composition of monthly income varies across schools. The best estimate I can provide define monthly income as the sum of national budgetary salary, school-provided salary, payment for extra classes and sessions, High School Entrance Examination bonus, and all other benefits. This estimate suggests that teachers at the county town

school are paid at least 5,000 RMB per month, while teachers at the township school and the town school receive around 3,000–3,700 RMB per month.

The national budgetary salary only makes up about 50% of the monthly income of teachers. The income gap is largely driven by the schools' relative capability to provide extra payment, benefits, and bonuses for teachers. The urban-rural income gap has created deep resentment among many rural teachers. Their feelings of injustice are apparently also affecting their passion for teaching and investment of time and efforts in students, as suggested by this quote from a rural teacher:

> *The gap in payment to urban and rural teachers is too big. This leads to that teachers in the countryside lose the passion [for teaching and educating]. [We] may have the capability, but [we] do not have the passion. Everyday [we] simply fulfill our duties for the few hours. [If you] ask him to be actively involved in teaching, to engage students, to tutor them before and after the class, no way. Hence, students are performing badly. (Mr. Yang, teacher)*

Another source of the school effect on adolescents' educational outcomes is the availability of role model and the general academic atmosphere both within school and beyond. In the fierce competition of the High School Entrance Examination and the College Entrance Examination, the brightest adolescents of middle school age are the most valuable, sought-after human resources for all middle schools and high schools in the county. Not surprisingly, the emergence of a mostly privately run boarding school in the county town—now the best middle school of the county—and the special Express Class (奥赛班, "Olympic Class") set up by the best high school of the county for middle school students, have drastically changed the student composition in the other middle schools, especially those hard-hit middle schools in

the countryside. Losing their best members, the remaining adolescents in the township school and town school have to turn to their second-best peers for role models.

As I mentioned earlier in this chapter, many students find life as a final-year middle school student boring and tiring and many of them simply feel alienated and become disengaged. This is especially true among the students from the township school and the town school. While teachers and students at the county town school felt that about 40% of their class do not like to study, those at the township school and town school remarked that more than 50% of their class are not taking their studies seriously.

Outside the campus, the county town, hosting all four high schools in the county and more than one-fifth of the total population of the county, also has a lower proportion of people who are doing labor out-migration than the other two smaller towns. Adolescents from the county town school have a greater chance of encountering seniors, neighbors, or cousins, who are studying in high school or even university; while their counterparts in the countryside are more likely to encounter people—including their seniors, peers, cousins or neighbors who have dropped out or graduated from middle school—who are directly or indirectly involved in labor out-migration. It is possible that these daily encounters and exposure to a general environment that is, alternately, conducive to pursuing higher educational achievement or migrant work might shape the aspirations adolescents have for themselves. The qualitative data from my fieldwork seem to suggest that adolescents at the county town school are more likely to envision a college life for themselves than those at the township school or town school.

Moreover, we can see that the effect size of school location is greater than that of type of parental migration, and at least as large as that of parental divorce. This is

not surprising given the dominant role of secondary school in adolescents' daily lives. Under the current education system and its extreme pressure for children to compete in academic exams, school plays a major role in disciplining and supervising children and preparing them for exams on a daily basis. Families' input regarding adolescents' daily lives is, in many ways, limited to simply providing economic resources.

6.3 Main Findings and Discussion

The first research question I ask in this study is what implications parental labor migration has for children's educational achievement. In most studies about parent-child separation caused by marital dissolution, children are found to fare worse than those who stay with both parents (Amato and Cheadle 2005; Potter 2010). Existing research on parental absence due to labor out-migration has reported mixed results regarding children's educational wellbeing, possibly due to the countervailing forces of the potentially positive effects of economic remittances, the adverse effects of parental absence, and the role of extended family members and social remittances (Arguillas and Williams 2010; Battistella and Conaco 1998; Lu 2012; McKenzie and Rapoport 2006; Meyerhoefer and Chen 2011; Xu and Xie 2013).

In this research, I used both detailed quantitative and qualitative data to explicitly examine the potential mediating channels through which parental migration might affect children's educational outcomes. In addition to academic performance, I highlight a crucial stage of educational progress for Chinese rural children by examining their transition from middle school to high school.

6.3.1 The Overall Effects of Parental Migration on Adolescents' Educational Outcomes

I found a small gap in Chinese language test scores and no significant difference in math test scores between left-behind adolescents and their non-left-

behind counterparts. This small disadvantage (less than 5 score points) of children from father-migrant and mother-migrant families in test scores is mediated through their lower level of dedication to study. When dedication to study was taken into consideration, the statistically significant gap in Chinese scores diminished and the negative sign of the coefficients of parental migration dummies on Math scores turned positive.

When it comes to transition to high school, parental labor migration exerts an overall negative impact on adolescents, because the negative effects transmitted through increased odds of parental divorce outweigh the positive effects via transmission of education value. The following sections will discuss the effect or lack of effect of the mediating channels explored in this research in greater details.

6.3.2 Lack of Mediating Effect of Home Study Environment

Surprisingly, I found no significant effect of having more than a few books at home on academic performance. However, book availability at home decreases the odds of leaving school relative to going to academic high school by 60%. This may suggest a cumulative effect of having some books at home on children's long-term orientation towards schooling. It could also signal greater involvement and commitment made by parents in children's education.

Nevertheless, there is no evidence supporting a mediating effect of having books at home between parental labor migration and educational outcomes. This is because the increased economic resources brought by parental labor migration are not translated into more purchases of books for children. In fact, migrant families even appeared to possess a smaller number of books than non-migrant families at first impression, although this association became insignificant after the location of school/community was taken into consideration.

6.3.3 Lack of Mediating Effect of Depressive Symptoms

Contrary to my expectation, data analyses do not support the hypothesis that parental labor migration is harmful to children's educational outcomes through negatively affecting their psychological wellbeing. I used level of depressive symptoms to capture psychological wellbeing in this research. Adolescents of migrant parents and non-migrant parents do not differ from each other in terms of the level of depressive symptoms, although additional analysis suggests that the accumulated length of mother-child separation is significantly positively related to children's depressive symptoms score. Apparently, simply categorizing parental migration is not able to capture some of its long-term implications for child wellbeing. This draws our attention to the multi-dimensional and dynamic process of parental migration.

Interestingly, parental absence does indeed reduce parental care and warmth as perceived by adolescents, but it also limits the occurrence of parent-child conflict. The former is negatively, while the latter is positively, related to the level of depressive symptoms and thus they cancel out the effects that parental migration might have on children's psychological wellbeing.

Also, as my interview data reveals, another explanation could be that migrant parents and left-behind children are actively exercising their agency to deal with the challenge of parental absence. Migrant parents may make use of short messages, phone calls, or even Internet chatting to care for and supervise their children at home. For example, Ye's father bought him a cell phone and recharged it every month so that Ye could update his parents on school schedules and issues regularly.

Migrant parents also enlisted help from other extended family members, enabled by prevalence of multigenerational coresidence and social support networks among extended kin. Many of the left-behind children I interviewed not only lived with grandparents, but also with uncles, aunts, and cousins, or had relatives nearby. In

other words, the absence of both parents does not necessarily mean that children are left on their own. The coping strategies of migrant parents and their active across-space caring for children, together with company and care from extended family members and even neighbors, help to explain the lack of disadvantages of left-behind adolescents in terms of psychological wellbeing. Below are some quotes from my interview data:

> *My dad and mom being away from me had no impact on me, because my neighbors all cared for me so much. And I did not overthink about [their being away] (Bei, girl)*
>
> *I feel that whether they are at home or not is the same, because my relatives are very kind to me (Lei, girl)*

6.3.4 The Lack of Effect of Caregiver's Involvement in Study and The Dominant Role of the School in Adolescents' Academic Life

Although grandparents can and often do serve as surrogates for absent migrant parents, they cannot completely replace the role of parents in children's lives. Grandparents are commonly perceived as more likely to be less strict and to spoil the child than parents. Moreover, due to their seniority in age and relatively worse physical condition, grandparents may not have the same energy level as parents to care for and supervise the child. The results presented in this chapter have confirmed that adolescents of migrant parents received less caregiver's involvement in study than their non-left-behind counterparts.

However, caregiver's involvement in study does not seem to matter much based on the results of data analyses in this study. After controlling for child characteristics, family background, and the location of school/neighborhood, caregiver's involvement in study had no significant effect on Chinese and Math test scores.

There are three potential explanations for this lack of effect of caregiver's involvement in study. The first is that the overall level of caregiver's involvement in study is not high enough to have any significant impact on academic performance. Most caregivers do not discuss children's study plans or learning objectives with them, or contact teachers to check how children are doing in school on a regular basis. Instead, the most common form of involvement is simply asking if their children have finished their homework or not. From my interview data, I came to realize that most adolescents do not have actively involved caregivers. Basically, adolescents are left to take full responsibility for their schoolwork.

The second explanation is that the limited education of the caregivers themselves makes their involvement in children's study difficult, if not impossible, particularly once middle school adolescents reach their final year. Many parents and a great majority of grandparents have only received primary or middle school education. As some adolescents commented in my interview, they do not ask for help from their caregivers when they have questions in study because their caregivers are not able to help.

Perhaps more importantly, for children in this age group, school, teachers, and peers play a predominant role in their academic progress and daily life in terms of how they actually spend their time. A typical school schedule for final-year, middle school adolescents is from 7am until 9pm, and repeats every weekday and Saturday (see Chapter 5) until the High School Entrance Exam. Additionally, many adolescents stay in school dormitories and only go home on Sundays. As a result, they spend very little time at home with their caregivers, thus it is not surprising that caregiver's involvement in study has little impact.

As I discussed in Chapter 2, middle schools in China put great emphasis on the progression rate to academic high school. To this end, schools organize the daily routines of teachers and students in a rigid, almost military manner. Teachers are evaluated and rewarded on the basis of students' performance on tests. Adolescents face tremendous pressure from their school and teachers to study hard and improve their performance on the monthly comprehensive exam, in order to compete in the High School Entrance Exam for the precious slots in the academic high school.

On the one hand, most of the adolescents I interviewed expressed hope that this final year in middle school would pass and they could finish the High School Entrance Exam as soon as possible. On the other hand, many of them fear the approach of the exam because they were not confident they will be accepted to the high school their teachers, parents, and they themselves hope they will attend.

Almost all adolescents, whether left behind or not, face this pressure in school to study hard. Regardless of where their parents are, the adolescents live similarly regimented lives in which their academic performance is largely determined by their own dedication to study and their relations with the teachers and peers they interact with from morning until evening on a daily basis.

Teachers tend to focus their attention on the more promising students in terms of examination performance. It is not uncommon for teachers to have individual consultations with top students after their monthly exam if they do not perform as well as expected. Form teachers sometimes hold meetings with top students in class to motivate them and boost their confidence. Meanwhile, when it comes to the students who are lagging behind and less obedient to strict class order and school rules, teachers take a laissez-faire attitude in dealing with them as long as they do not disturb other students.

Adolescents are at a developmental stage in which peers are increasingly important to their socialization and daily life. The theme of peer influence on adolescents' studying activity came up in my respondents' narratives. When their peers are studying hard, adolescents report feeling likewise motivated or pressured to work hard in school. When their peers are idling or playing around in classroom or on campus, they find it more difficult or challenging to concentrate. The following quote from Fang summarizes this point nicely:

> *My friends have the biggest influence on me. 'Jin zhu zhe chi, jin mo zhe hei' (One who stays near vermilion gets stained red, and one who stays near ink gets stained black.) If those who I play with do well in school, I will also do well. If they do badly in school, I feel [they] might have bad influence on me. Although I do not quite believe this, who says if they do badly, I will also do badly? (Fang, girl)*

6.3.5 The Minor Adverse Effect of Dedication to Study and The Resilience of Adolescents in the Absence of Both Parents

Adolescents left behind by one parent are less dedicated to schoolwork. The negative effects of parental migration on Chinese test scores are partly transmitted through the dedication to study. Although parental migration does not have statistically significant effect on Math test scores, the inclusion of dedication to study reversed the sign of the coefficients of father-migrant and mother-migrant from negative to positive in OLS regressions. This also supports the mediating role of dedication to study between parental labor migration and academic performance. That is to say, parental labor migration does indeed have some negative effect on academic performance through reducing children's own commitment to study.

However, adolescents who are left behind by both parents are no less dedicated to schoolwork than their non-left-behind counterparts, and they perform

equally well, if not better, on Chinese and Math exams. This is surprising because it seems natural to assume that children who are left behind by both parents will suffer most in terms of academic performance. The effect, one imagines, could play out through the reduced supervision of adolescent's behavior and study, and/or the worsened psychological wellbeing of the adolescents themselves, resulting in their lower level of commitment to study. But as this study shows, this is not necessarily the case. Adolescents left behind by both parents have exhibited remarkable resilience facing the challenge of long-term separation from both migrant parents.

Resilience or successful adaptation to an adverse environment has often been proposed in psychological and sociological studies to explain why some disadvantaged adolescents succeed against all odds (Cappella and Weinstein 2001; Floyd 1996; Masten 2001; Pan and Yi 2011). Protective factors that encourage resilience in children include self-esteem and self-efficacy, effective parenting, presence of other caring/supportive adults, social support, good school environment, and other community assets (Martin 2002; Masten 1994). Studies also suggest that personal beliefs and cultural values could enhance or discourage resilience (Martin 2002; Shek 2004; Wong and Song 2008).

In this study, the personal strength of the adolescents left behind by both parents may be derived from their understanding of parental migration, the quality of the parent-child relationship(s) within the family, and/or related Chinese cultural beliefs regarding personhood, filial piety, and the adversity of life. I discuss all of these below.

Firstly, the Confucian idea of personhood emphasizes self-cultivation ("修身") and people's inner strengths and virtues, such as integrity, self-restraint, self-reliance, perseverance, and tolerance (Ho and Kang 1984; Shek and Chan 1999; Shek 2004;

Xiao 2001). When facing adversity such as the parent-child separation in this study, Confucian philosophy would have one approach this as an opportunity for personal development.

Secondly, parents and children are viewed as members of a family unit who are obligated to fulfill their familial responsibilities to one another; these include working together to promote their collective welfare, of which children's academic achievement and future success is essential. A filial son or daughter should show respect and understanding for parents and repay parents for their care and aid (Sung 1999). Adolescents' sense of responsibility to their parents involves motivation in school to please their parents (Qin et al. 2009). From parents' perspective, they are doing their share of work by pursuing migrant work and earning income and it is the child's job to study hard in school.

Children's own understanding of the motivation of their parents' labor migration also has a potentially protective effect against the potentially adverse effect of parent-child separation. Feelings of being abandoned or unloved were extremely rare in adolescents' remarks about their lives in relation to their parents' labor migration. In fact, only Tian, scarred by her parental divorce, mentioned that her mother did not want her any more. Most adolescents understood labor migration as something undertaken by parents on behalf of their children's education and future prospects. And for their part, the adolescents respond with great strength and resilience in coping with the absence of their parents. They frequently mentioned the positive aspects of parent-child separation, such as the opportunity to become a stronger and more independent person. Consider, for example, the following quotes from Wen, talking about her parents' labor migration:

[The good side of their labor migration] is it made me understand the hardship of parents, and this motivates me, and makes me learn to value happiness and happy days.

[The bad side of their labor migration] is when I saw others having their parents at home to take care of them, I felt envious. Sometimes I wanted to cry, but I always hold on in the end. Perhaps some ganqing ("感情", affection, bonding, love) only reveal their value from a distance.

I don't want to [go and live with my parents], because it will be very costly, [and] my parents may not afford it. (Wen, girl)

Wen felt loved by and grateful to her migrant parents, although they have not lived together under the same roof for many years. Like Wen, many adolescents hope to be reunited with their parents some day in the future. But they understand the institutional barriers and pragmatic difficulties that make either the return of their parents or even their own migration not feasible or desirable right now.

Not all adolescents internalize these education values and cultural ideas about selfhood and filial child to the same extent; hence, we do not observe a positive effect of resilience for every child. Those children with strong resilience tend to share other common characteristics such as high self-esteem and self-efficacy, and respect, support and encouragement from peers and teachers. These factors help resilient children to do well in school, which in turn enhances their self-esteem and self-efficacy, and thus the virtuous circle continues.

6.3.6 Minor Beneficial Effect through Education Value

Researchers have argued that one of the main channels through which labor migration transforms origin communities is social remittances, or transmission of ideas, knowledge, behaviors, and values from destination cities to rural areas through

migrants (Kandel and Massey 2002; Levitt 1998). This research focuses on the transmission of education value. Migrant workers' working experiences and urban living may strengthen their perception of the importance of education for better job prospects and economic security, and they may, in turn, pass this strong, positive evaluation of education to their children also.

The data of this study, however, only weakly support the hypothesis that parental labor migration is positively associated with education value, except among mother-migrant families. Education value decreases both the likelihood of leaving school and the likelihood of going to vocational high school relative to academic high school for adolescents. These results suggest that the transmission of education value generates some protective effects of keeping adolescents in school.

6.3.7 Substantial Adverse Effect through Parental Divorce

I have shown that parental labor migration greatly increases the risk of living in a divorced or step-families for adolescents, possibly due to the long-term separation of spouses, changed marriage roles, expectations, attitudes and values, and/or increased risks of transgression. Parental divorce substantially increases the risk that adolescents will leave school, as well as the likelihood that they will go to a vocational high school instead of an academic one. In the final model in Table 6.6, parental divorce increases the odds of leaving school instead of going to academic high school by a factor of 6.79 and increases the odds of going to vocational high school relative to going to academic high school by a factor of 3.00. Path analyses of indirect effect support that part of the adverse effects of parental migration on educational outcomes is transmitted through parental divorce.

It is worth noting that parental migration is not significantly associated with parental marriage dissolution for those from father-migrant families. The arrangement

of the father doing migrant work while the mother stays at home is in agreement with the traditional gendered norms regarding labor division and thus may pose the least challenge to family structure and functioning among the three types of parental migration. In contrast, adolescents from mother-migrant and parents-migrant families are much more likely to live in divorced or step-families. Parental divorce may cause severe psychosocial challenges to children, which may lead to reduced interest in schooling and weaker commitment to pursuing further education. The stories of Tian, Ling, and Zhou presented in earlier sections have illustrated this point.

Parental marital dissolution may also put economic stress on the family and the limited economic resources may force children to stay out of school. Li dropped out of middle school shortly after the beginning of her last semester. Her parents divorced when she was about six or seven years old. She has been living with her father who relies on motorcycle taxi service for a living, and she links her decision to stop going to school to her worries about the family's financial situation.

Another factor related to increased financial pressure is larger sibling size as a result of parental remarriage. Larger sibling size means fewer resources available for each individual child's educational investment. For example, Tian's father remarried and had two more children with his current wife. He told Tian that if she did not make it to the best academic high school in the county after the High School Entrance Examination, there would be no further schooling for her. It is not hard to imagine that financial concern is thus part of the reason that Tian discontinued her schooling.

6.3.8 Discussion

Overall, parental migration has negative effects on children's academic performance and transition to high school. The negative effect of father's migration and mother's migration on test scores is due to a lower level of their children's

dedication to study. Compared to non-left-behind children, children from mother-migrant families and parents-migrant families are more likely to leave school, while children from father-migrant and mother-migrant families are more likely to go to vocational high school versus an academic high school. This negative effect of parental migration on transitioning outcome is mainly mediated through parental divorce.

Moreover, parental labor migration produces neither improvement in home study environment nor increase in the level of children's depressive symptoms, and it is only weakly negatively related to caregiver's involvement in study and positively related to educational value. Results of the data analyses also suggest that education value is a potential mediating channel linking parental labor migration and adolescents' transitioning outcome.

In addition, it is almost impossible to ignore the significant and independent effect of school/neighborhood on adolescents' educational outcomes. First of all, within the same school/neighborhood, parental labor migration does not make a difference in terms of the number of books at home. The initial negative effect of parental migration we observed on home study environment is actually attributed to between-school or between-neighborhood differences. Secondly, all else being equal, adolescents studying in the countryside middle schools scored significantly lower on the Chinese test than those studying in the county town middle school, again suggesting the effect of the urban-rural gap on the availability of bookstores and other stimulating resources.

Thirdly, even controlling for test scores and all other child characteristics and family background information, adolescents from the countryside middle schools are 5–7 times more likely to leave school or go to vocational high school as opposed to

academic high school, compared with their counterparts from the county town middle school. One possible explanation is that families in the county town are economically better off than those in the villages to begin with—something that is not captured by the measures of family socioeconomic status used in this research—and are thus in a better position to fund their children's education in the long run.

It could also be a result of the social reproduction of norms regarding educational progress. Adolescents in the county town on average are exposed to more positive academic role models, such as their seniors, relatives or neighbors who have gone to academic high school and then college. Conversely, children staying in the villages or towns are relatively more familiar with the stories about their cousins, classmates, or neighbors who discontinued school and became migrant workers.

These differences are reflected in adolescents' own visions of what their lives might look like when they reach age twenty or where they would like to live and work in the future. Relatively more countryside school adolescents mentioned doing migrant work at age twenty, while college life was more prevalent in the imaginations of county town school adolescents. And regarding their future residence and work place, though both groups of adolescents referred extensively to the big cities of China, county town school children were more likely to picture themselves in foreign developed countries such as the United States, England, and Japan. The economic considerations and aspirations regarding educational trajectory are often interrelated. Adolescents and their parents are likely to aspire higher for their future when they perceive a good chance of pursuing a better education.

Chapter 7 Conclusions

7.1 Review and Discussion of Findings

7.1.1 Overall Negative Effect of Parental Migration

The aim of this current study has been to examine whether and how parental migration affects rural adolescents' educational outcomes. Specifically, I investigated whether left-behind and non-left-behind adolescents differ in academic performance and transition from middle school to high school as a result of parental labor migration.

The findings are mixed. Overall, I found a negative effect of parental migration on adolescents' test scores and transitioning outcomes. Adolescents from father-migrant and mother-migrant families scored somewhat lower in Chinese and math tests than those from non-migrant families. This negative effect of father's migration and mother's migration on test scores is mediated through decreasing the child's dedication to study.

With regard to the transitioning outcome from middle school to high school, mother's migration and parents' migration seem to increase the likelihood of leaving school relative to going to academic high school for adolescents, while father's migration seems to benefit adolescents in terms of staying in school and continuing further education. My explanation for this is that father's migration may be less disruptive than the other two types of parental migration. Moreover, both father's migration and mother's migration increase the likelihood of going to vocational high school relative to going to academic high school, while parents' migration has no effect on the type of high school in which adolescents enrolled.

Though the effect of parental migration on transition to high school through social remittance pathway is positive, its magnitude is small. Instead, parental divorce could help to explain the higher relative risks of leaving school among adolescents from mother-migrant and parents-migrant families, and the higher relative risks of going to vocational high school for adolescents in mother-migrant families.

It is also worth mentioning that contrary to my expectation, parental migration does not affect girls and boys in different ways, and girls are not necessarily disadvantaged in terms of transitioning outcome compared to boys. In fact, girls appear to have an even lower likelihood of leaving school relative to going to academic high school than do boys. However, at the same time, girls seem to be more likely to go to vocational high school relative to academic high school than are boys. As in many societies across the globe, girls have benefited disproportionately from the improving educational opportunities in China. The declining fertility, increasing economic opportunities for women, and changing ideas about gender may have led to a gradual decline (but not yet disappearance) of son preference among rural Chinese parents concerning educational investment in children. Daughters may be as likely as sons to receive more years of education. Yet, rural Chinese parents may still favor sons over daughters with regard to the type of high school they send children to, as investment in academic high school requires stronger commitment and more resources than that in vocational high school. It remains to be seen whether this gender difference will diminish as daughters become more incorporated into the intergenerational exchange between parents and children.

Moreover, even within my fieldwork context of a single county, I found striking differences in educational outcomes among adolescents from the county town, which is more developed, versus the outcomes for adolescents from lower-level

towns and townships, which are more agriculture-dominant and less developed. The magnitude of the effects of school/neighborhood is no smaller than that of various family background variables. Numerous studies have shown the remarkable urban-rural gap in nearly every aspect of life in China (Brown and Park 2002; Hannum 1999; Hannum and Park 2002; Whyte 2010; Wu 2011). It is not just left-behind children who are lagging behind, but also their non-left-behind counterparts in rural China. Put simply, this suggests that the more significant disadvantage is not being left-behind, but being rural.

7.1.2 Parental Divorce as a Potential Channel

One compelling finding from my fieldwork is that parental divorce is a significant pathway for understanding the impact of parental labor migration on children's wellbeing. On the one hand, researchers have pointed out that individual migration may give rise to marital instability through straining marital roles and relationships, changing normative values and social control levels, and increasing risks of transgression (Finnäs 1997; Frank and Wildsmith 2005; Locke et al. 2014). On the other hand, the literature on family structure and child development have generally found that children in a divorced families are worse off in many aspects of life than their counterparts in intact families (Amato 2000; Kim 2011).

I found that adolescents from mother-migrant and parents-migrant families are more likely to have parents who divorce, compared to adolescents who stay with both parents; the likelihood is equal for adolescents in father-migrant families and their counterparts who stay with both parents. This is probably because the arrangement of father being a migrant worker and mother staying at home is consistent with the traditional gendered division of labor and, thus, least disruptive among the three types

of parental migration with regard to marital relationship dynamic and family functioning.

Also, I found that adolescents of divorced parents are more likely to leave school or go to vocational high school relative to going to academic high school than those in intact families. Furthermore, parental divorce helps to explain the disadvantage of adolescents from mother-migrant and parents-migrant families in terms of transitioning outcome. In other words, part of the adverse effect of parental labor migration on adolescent's educational wellbeing is transmitted through parental marital dissolution.

Analysis of the qualitative data reveals that parental divorce has a long-term negative impact on adolescents with regard to their educational outcomes. Firstly, adolescents of divorced parents are more likely to be psychosocially disturbed and to lose interest in schoolwork and further education. Secondly, parental divorce may be associated with decreased economic resources available for adolescents' educational investment. Thirdly, parental remarriage often leads to an increase in siblings for the adolescent and thus more competition for family resources, including those that support education.

However, the mediating effects of parental divorce between parental labor migration and adolescents' transition to high school are likely to be overestimated to some extent due to omitted variable bias. I acknowledge the possibility that in certain cases, the preexisting marital problems or other unobserved characteristics might cause both divorce and labor out-migration. Although a causal relationship between parental migration and parental divorce cannot be established in this study, the results presented in Chapters 5 and 6 do suggest a strong association between the two, as well as a substantial negative impact of parental divorce on children's educational

outcome. These findings reveal the need to pay greater attention to parental marital instability as a potential pathway mediating for the impact of parental migration on children's outcomes. In future research, it will also be important to investigate the underlying mechanisms between individual labor migration and marital instability in rural China. Given the massive scale of internal labor migration accompanied by rising divorce rates, Chinese policymakers should give special attention to the implication of these social trends for the wellbeing of left-behind children in divorced families.

7.1.3 Protective Effect of Economic Resources

Although this study is not able to show quantitatively the positive effect of increased financial resources due to lack of information on remittances, this effect has been strongly confirmed in my qualitative data by adolescents, caregivers and teachers. Remittances from migrant parents are said to have improved living conditions and standards including housing, food, and clothes, and educational environment and resources for children—though it is acknowledged that more economic resources do not necessarily or automatically lead to a greater number of books at home, the measurement of educational investment used in this study. We might also note, however, that the impact of economic resources from migrant parents is likely to be future-oriented and some positive effects may, therefore, be characterized by a time lag. Many left-behind adolescents mentioned, for example, that their parents are doing migrant work in order to better provide further education for them in the future.

It has also been shown in many other contexts with larger survey samples that remittances improve enrollment status and educational attainment of left-behind children (Acosta 2006; Edwards and Ureta 2003; Kandel and Kao 2001; Lu and

Treiman 2007; Nobles 2011; Yang 2008). Increased economic resources could lift a family's financial constraints and provide more resources for children's education, reduce the demand for children to perform farm work or paid work, and mitigate the negative impact of parental absence.

7.1.4 Caring Across Space and Beyond Immediate Family: Migrant Parents, Extended Kin, and Neighbors

Researchers have noted various coping strategies of parents who are away from their children's daily lives because of international labor migration (Nobles 2011; Parreñas 2001; Parreñas 2005; Schmalzbauer 2004). Migrant parents in China are no exception.

Migrant parents often try to continue parenting across space with the aid of modern telecommunication technology. Most of the migrant fathers and mothers in my sample were reported calling their children at least once a week. A few migrant parents call almost every day, and some others also try to do Internet video chatting with their children. In doing so, they stay informed about their children's daily lives and maintain a certain level of familiarity and affection with them.

One advantage that Chinese internal migrant parents enjoy as compared to transnational migrant parents is that short-term parent-child reunion in the destination cities is relatively more feasible and affordable. As presented in Chapter 5, migrant parents and their children also make use of summer and winter vacations to reunite the family and spend more time together in cities where parents are working.

Quite a number of adolescents have even received a few years of primary school education in such destination cities, though they usually return to their hometown for middle school education sooner or later due to institutional barriers associated with Hukou. These short-term visits and family reunions provide parents with opportunities to physically care for their children, and likely help children to

understand why their parents are pursuing migrant work and what their lives are like in the destination cities.

Strong norms of intergenerational exchange and kinship networks enable migrant parents to rely on kin to provide surrogate parental care for children. When only one parent is away, the other parent is often the primary caregiver for the child, sometimes in conjunction with grandparents and/or uncles and aunts. When both parents are away, predominantly grandparents, and sometimes uncles or aunts or sometimes both, serve as the surrogate parents for children. Such extended caregiving is not unique to left-behind children; even children whose parents are not migrants often refer to relatives or neighbors as important figures in their daily lives.

The coping strategies adopted by migrant parents and the care provided by extended kin and even neighbors help to mitigate the adverse influence of parental absence on children's life.

7.1.5 Lack of Effect of Caregiver's Involvement in Study and Prominent Role of School

Western literature often emphasizes the importance of parental supervision of study in children's educational attainment, although the size of the effect might differ by other factors such as parenting style, ethnicity and family socioeconomic status (Jeynes 2007; Spera 2005; Steinberg et al. 1992). Whether this is the case in other contexts where level of socioeconomic development is lower and parents are relatively much less educated remains to be seen. I would argue that the role of parental involvement in study depends on parental characteristics and the other factors shaping the context in which adolescents are growing up and learning.

In this current study, given that grandparents are older, often less healthy and less energetic, and able to exercise less authority over children than parents, it is not surprising that adolescents left behind by both parents receive lower levels of

caregiver's involvement in study. However, caregiver's involvement in study is found to be unrelated to adolescent's dedication to study. And when adolescent's dedication to study is controlled for, caregiver's involvement in study no longer has a significant effect on child's academic performance. It seems that in this context, the extent to which caregivers get involved in the child's study does not matter much. There are a number of possible reasons for this.

First of all, the overall level of caregiver's involvement in study for my sample is quite modest. Based on my interviews with adolescents, a laissez-faire attitude of their caregivers towards their schoolwork is not uncommon.

Secondly, even if caregivers are willing to get involved in a child's schoolwork, their own relatively low educational levels act as a limitation. A majority of fathers and mothers and an even greater majority of grandparents have received only primary or middle school education. It would thus be very challenging for them to be actively involved in assisting children studying at the Grade 9 level or higher.

Lastly and most importantly, rural adolescents studying in middle school, especially those in their senior year preparing for the highly competitive High School Entrance Exam, usually spend a tremendous amount of time at school. The time they are allowed to spend at home and with their parents or caregivers is quite limited, compared to their counterparts in urban settings and western countries.

Under the education system of China depicted in Chapter 2, middle schools are under intense pressure to produce better performance in terms of progression rate to high school. Progression rate is the most important criterion used to evaluate school principals, to confer higher-level professional titles to teachers, and even to directly determine the amount of teachers' performance bonus. In addition to the long hours of study at school during the daytime, students also attend compulsory self-study

sessions in the evenings and extra classes on Saturdays and even Sundays. These are common practices in many middle schools of Hubei Province and other provinces as well.

Additionally, schools and teachers invest a lot of energy and effort in supervising students' behavior and monitoring their school progress. In this current study, a majority of students from the township school and a few students from the town school were also staying in dormitories on campus for about five to six nights per week. Their dormitory life is close surveilled by the schoolteachers. It is thus not surprising that school has significant and substantial effects on adolescents' academic performance and transitioning outcomes.

7.2 Future Research Plans

The next step in my research would be to assess the extent to which the research framework applied in this study and findings from my local sample hold in a larger and more representative national sample. Some preliminary results derived from the 2010 wave of the China Family Panel Study show that parental migration status does not seem to impact child's academic performance, thereby providing some evidence for the validity of my research. It would be worthwhile to further delineate the multiple mediating channels between parental labor migration and child's educational achievement with a newly collected national survey specifically on migration and children's wellbeing.

I would also like to explore further the association between parental migration and parental marital dissolution, and expand the study of the impact of parental labor migration on children to include migrant children and local children in the destination cities.

7.3 Limitations

This dissertation has several limitations. The most general issue is that the results are based upon small, non-representative data, rather than a large, representative national sample. The issue of generalizability invariably crops up in situations like this. My study partially addresses this problem by doing additional analyses with a larger, nationally representative sample, and referencing other studies on left-behind children's educational outcomes using national survey data in China.

Another problem is that the time-span of the data collection is extremely limited. It would have been ideal to have longitudinal data covering a longer period of these adolescents' lives, but given the time constraints of this particular study, I attempted to mitigate this issue by collecting data at multiple points of time and to utilize retrospective information.

A third limitation is the missing information on certain mediating channels. For example, remittance is crucial to measure the financial benefits of parents' labor migration, but I was not able to examine it quantitatively in this study. Fortunately, I do have strong evidence from the qualitative data showing the beneficial effects remittances have on the lives of children with migrant parent(s).

These limitations are offset at least partially by the richness and triangulation of the data itself. The data was collected using both survey and interview methods with multiple sources, including adolescents, parents, grandparents, and other key figures such as caregivers and teachers. Overall, the data was valuable and rich for advancing our theoretical understanding concerning the pathways of how parental labor migration affects adolescents' educational achievement in a migrant-sending community of central China.

7.4 Final Words

If there is a single take-home message in this dissertation, it would be that parental labor migration affects adolescents' educational wellbeing in both positive and negative ways, and that parental divorce is a significant pathway between the two. As the negative effects via increased risks of parental divorce are larger than the positive effects through transmission of education values, parental migration has an overall negative impact on adolescents' transition to high school. This has long-term implications for educational inequalities in rural China as left-behind children and migrant parents are disproportionately bearing the social costs of internal labor migration.

Last but not least, children's educational outcomes are best understood in a broader social context that takes into consideration the various factors that influence students' time use, perceptions, roles, and values. The findings of this study suggest that investigations into parental labor migration and children's wellbeing should move beyond the family unit to consider the broader contexts such as school, education system, economy, and culture. Across different communities, we observe substantial differences in adolescents' educational outcomes. Moreover, the size of the school/neighborhood effect is comparable to or even larger than that of parental divorce, the most prominent factor among family characteristics. The issue, in short, is not that migrant parents are leaving their children behind, but that China's development strategies and institutional barriers have left behind rural communities and adolescents as a whole.

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Appendices

Appendix A. Main interview questions

Adolescent Interview
Introductory, warm-up questions:
What is your favorite pastime?

Specific areas for follow-up questions:
How do you like your school?
How do you like your classmates?
What kind of person is your best friend?
Who is your favorite teacher?

How have your parents been involved in your study?
How close are you to your father?
How close are you to your mother?
What was your saddest moment in life?
What was your happiest moment in life?
What are the good things and what are the bad things about your parents' migrating to work?

What is your plan after graduation?
Which person in your life has influenced you the most?
What do you want to be when you grow up?

Parent/care-giver Interview
Specific areas for follow-up questions:
I would like to know about the migrant work experience of his/her father/mother.
How often do you/child's father/child's mother call home? How frequently have you/child's father/child's mother sent money home?
How do you think life is different for the child when his/her father/mother is away doing migrant work?
How have you been involved in child's study?
How close is the child to you/his/her father/mother?

Teacher Interview
Specific areas for follow-up questions:
How would you assess the child's academic performance?
How would you assess the child's behavior?
How does the child get along with his/her classmates/friends?
How often does the child's parent or caregiver contact you asking or discussing the child's academic performance and behavior?

Appendix B. Summary of Adolescents Interviewed

Bei, girl
Taken care of by grandparents before age 8 while parents were doing migrant work and stay with both parents since then. She has a younger brother. Her family is in debt. Mother did migrant work for a year when she was in Grade 7. Both parents planned to restart migrant work. Her parents expect her to study hard and enter a good academic high school. She enrolled in the second best academic high school of the county in September 2013.

Cheng, boy
Taken care of by grandparents when he was young while parents were doing migrant work. Both parents have been working at home since he was 8 years old. He has a younger sibling. His parents have little involvement in his study. He lost interest in studying since Grade 6 and did not do well in school. He enrolled in a vocational high school after middle school.

Dai, girl
Taken care of by mother and grandmother at home. Father is doing migrant work in adjacent province. She has a younger brother. Grandmother was highly involved in her study when she was in kindergarten and early primary school. Parents and teachers have high expectation of her. She is highly motivated and hardworking. She enrolled in the best academic high school of the county.

Dong, boy
Taken care of by grandparents before Grade 5 while parents were doing migrant work in Shanghai. Both parents have been working at home afterwards. He has a younger brother. His younger uncle lived just next door and was tutoring him when he was in Grade 2. He did well in school. He went to the second best academic high school of the county.

Duo, girl
Both parents are at home. She has a younger brother. Parents are not supportive of her study. She stopped going to school several time and finally dropped out before graduating from middle school. She started doing migrant work in a southern city of China.

Fang, girl
Both parents have been doing migrant work for more than 10 years. Their maternal grandmother brought up her and her elder sister. Her elder sister is in college. She is doing well in school. She is outgoing and optimistic. She has good relationships with classmates, friends and teachers in school. She got into the best academic high school of the county.

Shuang, girl
Her parents got divorced when she was about 5-7 years old. Her father remarried when she was about 9-10 years old. She has one younger half-sister. Her father is working in a southern city of China as a manager and earns a good income. Her grandparents are highly devoted to taking care of her and getting involved in her school life. They are well supported by her father who calls home and sends gifts back often. She is humorous, optimistic and often smiles. She gets along well with classmates. She did well in school and was admitted to the best academic high school of the county.

Gao, boy
His parents worked as migrant workers for about four years when he was in primary school and he was taken care of by grandparents. Since Grade 5, he has been staying with both parents at home. His parents are supportive and encouraging. He is highly interested in studying, motivated and hardworking. He did well in school and enrolled in the best academic high school of the county.

Hai, boy
His parents have been doing migrant work in a southern city of China since he was three years old. He grew up under the care of grandparents who also take care of his two cousins. He has a younger brother. His parents call home about 2-3 times a week. His home is very near to the middle school he was attending. He was doing ok in school. He enrolled in the second best academic high school of the county.

Hao, boy
He lives with parents, younger sister and grandmother at home. His mother works in a nearby factory and goes home every weekend. His parents were migrant workers before he entered Grade 6 and he was taken care of by maternal grandmother first and then paternal grandmother. While being away, his parents called him every day. He is talkative and outgoing. He is close to parents. His parents expected him to get in the best academic high school of the county and he did it.

Jia, boy
He lives with his uncle's family. His parents have been doing migrant work for more than 10 years. He was doing ok in school and enrolled in the second best academic high school of the county.

Kong, boy
He lives with grandparents and younger brother. His grandparents have brought up 4-6 grandchildren in total. His parents have been doing migrant work for more than 10 years. He went to visit parents in the city where they worked several times and did one semester of primary school there. He is shy and does not talk much. He gets sick quite often. He was doing ok in school and enrolled in the second best academic high school of the county.

Lei, girl
She stays at aunt's place during weekdays and goes home on weekends. She has parents, younger sister at home. Her parents have gone out to do migrant work several times. When her parents were away, she was staying with maternal grandmother or aunt or grandmother's sister. Her parents are quite involved in her study. They call her teachers quite often, buys her books and checks on her. She felt close to her relatives and to her parents. She was doing well in school and enrolled in the second best academic high school of the county.

Lian, girl
She lives with parents and younger brother. She is not interested in studying. Her parents do not seem to be involved in her study either. She enrolled in a vocational high school.

Lin, girl
She lives with parents and younger brother. Her younger sister stays with maternal grandmother. She is sentimental, expressive, and motivated. Her uncle is a math teacher and very supportive and encouraging towards her schooling. She enrolled in the best academic high school of the county.

Ling, boy
He lives with father, step-mother and younger half-sister. His grandparents are just staying across the road. His father and mother were migrant workers when he was very young and got divorced when he was 6 years old. His father and step-mother were also doing migrant work for several years. They returned home last year to build a new house for the family. While parents were away, he was taken care of by grandparents. He was troubled by parents' divorce and lost interest in studying since primary school. He discontinued schooling after middle school.

Long, girl
She lives with mother. Her elder sister graduated from college. Her father has been doing migrant work since she was very young and goes home about once a year. He calls home almost every day. She feels close to father. She is outgoing, optimistic, motivated and hardworking. Their former landlord and neighbor cares about her study very much and she always feel motivated and encouraged. She was admitted to the best academic high school of the county.

Mo, girl
She stays with parents and a younger brother. Her parents have done about two to three years of migrant work before she was born and again when she was very young. While parents were away, she was taken care of by maternal grandparents. Her families hope that she could study well and study in an academic high school and then a college. However, she lost interest in studying when she entered middle school. She stopped going to school before graduating from middle school.

Qiang, boy
He stays with grandparents and a younger brother. His grandparents were not able to supervise him effectively. His parents have been doing migrant work for more than 10 years. He did Grade 4 in a southern city of China where his parents worked and the curriculum was different from what was in Tongcheng. Since then, his performance in school declined and he lost interest in studying. He went to a vocational high school.

Qin, boy
His parents have been doing migrant work since he was about 2 years old. He was living with grandparents until beginning of middle school. He has been staying with uncle's family since he entered middle school. He went to visit parents in the city where they worked twice during summer break. His parents call him about once a week. He does not feel close to them. He has been doing well in school and his parents, uncle and teachers have high expectation of him. He was admitted to the best academic high school of the county.

Rong, girl
She lives with her father and two younger brothers. His father mainly does construction work. Her mother used to be staying at home and started working in a nearby factory recently. Her grandmother lives nearby and comes to take care of her younger brothers at times. She is highly motivated, hardworking and capable. She did very well in school and was admitted to the best academic high school in the whole prefecture.

Shan, girl
She lives with maternal grandparents, aunt, younger brother and younger cousin. Her mother has been doing migrant work since she was young. Her father was doing short-term, seasonal migrant work in places nearby before passing away when she was about 8 or 9 years old. She was doing ok in school. Her parents had high expectation of her. Her father was quite involved with her study in primary school. She gradually lost interest in studying in middle school. She enrolled in an academic high school.

Sheng, boy
He lives with parents, grandparents and younger sister. His parents have done migrant work for about 5 or 6 years before he was in Grade 2. His father was highly involved in his study in Grade 3 and 4 and he was doing well at that time. Then his parents moved to a neighboring town to do business for a couple of years. His parents care about his study and expect him to study hard. He was doing ok in school and enrolled in the second best academic high school of the county.

Shi, boy
He lives with mother. He is close to grandmother and aunt. His father started to do migrant work recently and calls home about 2 to 3 times per week. He went to a vocational high school after middle school.

Su, girl
She lives with mother and younger brother in a rented house in the town. Her father works from their home village and comes to visit them every weekend. She was hardworking and seemed to be stressed. She did well in school and was admitted to the second best academic high school of the county.

Tian, girl
Her mother has been doing migrant work since she was very young. Her parents got divorced when she was about 2 to 3 years old. Her father remarried and she now has a younger half-brother and a younger half-sister. Her relationship with stepmother is not very good. Her father told her if she could not make it to the best academic high school; there would be no more schooling for her. She dropped out from middle school before graduation.

Wang, girl
She has been living with her aunt's family since Grade 6. Her parents have been doing migrant work for many years. She did one and a half years of primary school in her mom's natal province. Before Grade 6, she was taken care of by grandmother. Her mother cares a lot about her study and is quite involved. Her parents bought an apartment near to the school where she would be studying. Her mother calls her teachers quite often to check on her. She was hardworking and admitted to the best academic high school of the county.

Wen, girl
She lives with maternal grandparents, cousin and nephew. Her parents have been doing migrant work for many years. She visited them in the city where they worked once and stayed for two months. She feels close to her parents. She is hardworking and doing well in school. She enrolled in the best academic high school of the county.

Xian, girl
She lives with grandmother and younger sister. Her parents are doing migrant work in a nearby city and goes home about once every one month or two months. She has spent three summers with parents in the city. Her parents have high expectation of her and are strict with her study. She is highly motivated and very hardworking. She entered the best academic high school of the whole prefecture.

Xiang, boy
He lives with mother. His father is doing migrant work in another province. His mother works in a bank and is highly involved in his study. He was doing ok in school and was admitted to the best academic high school under extra quota that charges a big amount of money.

Yan, girl
She lives with parents and younger brother. Her parents have done migrant work before she entered Grade 5 or 6 and she was taken care of by grandparents. Her parents are involved in her study and have high expectation of her. She was highly motivated and hardworking. She was admitted to the best academic high school of the prefecture.

Yang, girl
She lives with maternal grandparents and two younger brothers while her parents are doing migrant work in a northern province of China. She was born and grew up in a southern province of China until Grade 8. She was doing ok and enrolled in the second best academic high school of the county.

Ye, boy
He lives with grandfather. His parents have been working in a southern city of China for many years. He did Grade 1 in the city where his parents worked. His father is highly concerned with his study. His father calls him about once a week and also calls his teachers to check on him quite often. He was hardworking and did well in school. He enrolled in the second best academic high school of the county.

Yong, boy
He lives with parents and eldest sister. His elder sister is working in an eastern province. His family is relatively well off due to his father's high earnings. He was not interested in studying and sometimes got into fights in school. He enrolled in the second best academic high school of the county.

Yu, girl
She lives with both parents. Her parents are caring and not very strict with her study. She is happy and outgoing. She enrolled in the second academic high school of the county.

Yuan, boy
He lives with parents, grandmother and elder sister. His elder sister has been doing migrant work to support family and his education since graduation from middle school and will start doing it again in the following year. His uncle's family lives just next door. He was close to his uncle who cared about him a lot and had high expectation of him. His parents and elder sister have high expectation of him. His cousin is studying in a prestigious university and his parents and sister expect him to follow cousin's footsteps. He is smart and working hard. He was admitted to the best academic high school of the county.

Yue, girl
She lives with mother and younger sister. Her grandparents live in the same building. Her father is doing migrant work in another province and calls home every day. She is hardworking and doing well in school. She enrolled in the second best academic high school of the county.

Zhou, boy
He lives with grandparents and two younger cousins. Both of his parents have been doing migrant work for many years and his grandparents were taking care of him. He did 1 to 2 years of primary school in the city where his parents worked. He repeated Grade 7 twice. His parents got divorced recently. A few months later, he dropped out from school before graduating from middle school.

Appendix C. Selected Questions from Adolescent Questionnaire, Caregiver Questionnaire and Teacher Questionnaire

C1. Adolescent Questionnaire (1st round)
Questionnaire No.: _____

Section A. Demographic Information 个人基本信息

A01. Name 姓名: _____ Class No.班级: _____

A02. Gender 性别: _____ 1.male 男 2.female 女

A03. Year and month of birth 出生年月 [Please fill in your year and month of birth in western calendar first, if you are not sure about or if you do not remember it, please fill in your lunar calendar birth year and month 请优先按照公历填写，假如不确定或不记得公历生日，则请填写农历/阴历]
_____ Year 年 _____ Month 月 [western calendar 公历/阳历]
_____ Year 年_____ Month 月 [lunar calendar 农历/阴历]

A04. Your Hukou status 户口性质: _____ 1.agricultural 农业 2.non-agricultural 非农业
Your Hukou location 户口所在地: _____Province 省 _____Prefecture 市 _____County 县 _____ Town/Township 镇/乡

A05. Please tell me you contact information 请告诉我你的以下联系方式:
Phone number 手机: _____ QQ: _____
Email address 常用电子邮箱地址: _____

A06. Please choose the number of categories that apply to you 请选择合适的数字填写在横线上:
Since this year 今年开始到现在, your primary caregiver is 你的主要看护人是 _____, secondary caregiver is 次要看护人是_____ (primary caregiver refers to the person who lives together with you and takes care of your life 看护人指和你住在一起，照顾你的生活的人)
1.mother 母亲 2.father 父亲 3.paternal grandmother 祖母 (father's mother) 4.paternal grandfather 祖父 (father's father) 5.maternal grandmother 外祖母 (mother's mother) 6.maternal grandfather 外祖父 (mother's father) 7.elder sister 姐姐 8.elder brother 哥哥 9.aunt 阿姨/婶婶 10.uncle 叔叔/伯伯 11.other 其他 [please specify your relationship to this person 请注明你与他/她的关系: _____]

Please tell me the phone number of your primary caregiver 请告诉我你的主要看护人的联系电话: _____

A07. If your primary caregiver in A06 is not your mother or father, please tell me your father or mother's contact number 如果你在 A06 中填写的主要看护人不是母亲或父亲，请告诉我你母亲或父亲的联系电话:
Mother 母亲: _____ Father 父亲: _____

A08. Your home address is 你的家庭住址是:
Tongcheng County 通城县 _____ Town/Township 镇/乡 _____ Street/Village 街道/村 _____ Neighborhood 居/组 _____ House No.门牌号码

Section B. Learning Environment

B08. How many books do you have at your home (excluding textbooks, exercise books etc.)? 请问你家大概有多少本书（不包括教材，学习辅导材料等）

1. Non 2.less than 10 3.10-20 4.21-50 5.51-100 6.101-500
7. More than 500

Section D. School Environment

D02. The following are some statements describing how you feel about your school. Please read them carefully and indicate whether you completely disagree, disagree, agree or completely agree with each statement. 下列语句是对你感受到的学校情况的一般性描述。请你仔细阅读, 对于每一个说法,请选择你是完全不同意,不同意,同意,还是完全同意?

	Completely disagree 完全不同意	Disagree 不同意	Agree 同意	Completely agree 完全同意
a. My teacher is very strict. 我的老师很严厉				
b. My teacher trusts me. 我的老师信任我				
c. My teacher is fair. 我的老师是公平的				
d. My teacher is impatient with me. 我的老师对我没有耐心				
e. My teacher knows about my academic progress. 我的老师知道我的学习进展				
f. My teacher respects my opinions. 我的老师尊重我的看法				
g. My teacher is very friendly. 我的老师很友善				
h. My teacher often criticizes me without any reason. 我的老师经常没有理由地批评我				
i. My teacher voluntarily offers help to me. 我的老师主动帮助我				
j. My teacher leaves time for talking to students. 我的老师会安排出时间跟学生交谈				
k. I feel close to my classmates. 我和同班同学亲近				
l. I could share whatever problem or issue with my classmates. 我有什么问题烦恼可以和同班同学分担				
m. I usually get along well with my classmates. 我和同学通常相处愉快				
n. I feel lonely in class. 我在班里感到孤独				
o. My classmates often help each other				

out. 我们班里同学经常互相帮忙				
p. I like my campus. 我喜欢我们学校的校园				
q. Our classroom facility is satisfactory. 我们班的设施条件令人满意				
r. My seat in class is comfortable. 我的座位是舒适的				
s. I feel that my class is crowded. 我觉得我们的班级拥挤				
t. School toilet is clean. 学校厕所是干净的				
u. The quality and quantity of school sports facilities are sufficient. 学校的运动场所数量和质量是足够的				
v. The quality and quantity of school lab facilities are sufficient. 学校的实验室数量和质量是足够的				
w. The quality and quantity of school computer lab facilities are sufficient. 学校的计算机室数量和质量是足够的				
x. School library resources are sufficient. 学校的图书馆资源是足够的				
y. School multi-media resources are sufficient. 学校的多媒体设施是足够的				
z. Extracurricular activities for us are sufficient. 我们的课外活动是足够的				
aa. I feel belonging to this school. 我对这个学校有归属感				
bb. I am happy to be a student of this school. 我乐意做这个学校里的一名学生				
cc. I feel I am an outsider in this school. 我觉得我在这个学校里是个外来者				
dd. Overall, I like my school. 总的来说，我喜欢我的学校				

E. About Parents' Out-Migration Work Experience 父母外出工作的情况

E01. When you were in Grade 7, 请问你读初中七年级的时候，

	Father 父亲	Mother 母亲
a. Was he/she doing migrant work? 他/她是否在外打工？[Choose the number that suits you]【请选择适合你的数字】:		

1. Yes 是 2. No 否【Skip the following and go to E02 请跳过本表以下题目，直接从 E02 开始回答】 3. Don't know 不知道【Skip the following and go to E02 请跳过本表以下题目，直接从 E02 开始回答】 4. Not applicable 不适用【Skip the following and go to E02 请跳过本表以下题目，直接从 E02 开始回答】			
b. Where did he/she do migrant work? 他/她在哪里打工？ 【what place in which province 请填写什么省的什么地方】			
c. For how long he/she stayed at home? 他/她在家呆了多久？ 【in day or month 按照天或者月来回答】			
d. How frequently did he/she contact you 他/她跟你的联系情况【Please choose one that applies accordingly for h1, h2, h3, h4 and h5 请分别为 h1, h2, h3, h4, h5 选择合适的频率，填写相应的数字序号】:			
Frequency 频率： 1. Never 从不 2. Less than once a month 平均一个月不到一次 3. One to three times a month 一个月一到三次 4. Once a week 一周一次 5. At least twice a week 一周两次及以上	h1. Phone call 打电话		
	h2. Text message 发短信		
	h3. Letter 写信		
	h4. Online chatting 网上聊天		
	h5. Other 其他方式【Please specify 请注明：_____】		

E02. When you were in Grade 8 请问你读初中八年级的时候，

		Father 父亲	Mother 母亲
a. Was he/she doing migrant work? 他/她是否在外打工？[Choose the number that suits you]【请选择适合你的数字】: 1. Yes 是 2. No 否【Skip the following and go to E03 请跳过本表以下题目，直接从 E03 开始回答】 3. Don't know 不知道【Skip the following and go to E03 请跳过本表以下题目，直接从 E03 开始回答】 4. Not applicable 不适用【Skip the following and go to E03 请跳过本表以下题目，直接从 E03 开始回答】			
b. Where did he/she do migrant work? 他/她在哪里打工？ 【what place in which province 请填写什么省的什么地方】			
c. For how long he/she stayed at home? 他/她在家呆了多久？ 【in day or month 按照天或者月来回答】			
d. How frequently did he/she contact you 他/她跟你的联系情况【Please choose one that applies accordingly for h1, h2, h3, h4 and h5 请分别为 h1, h2, h3, h4, h5 选择合适的频率，填写相应的数字序号】:			
Frequency 频率： 1. Never 从不	h1. Phone call 打电话		
	h2. Text message 发短信		

2. Less than once a month 平均一个月不到一次 3. One to three times a month 一个月一到三次 4. Once a week 一周一次 5. At least twice a week 一周两次及以上	h3. Letter 写信		
	h4. Online chatting 网上聊天		
	h5. Other 其他方式【Please specify 请注明：_____】		

E03. Currently, 请问现在，

	Father 父亲	Mother 母亲
a. Is he/she doing migrant work? 他/她是否在外打工？[Choose the number that suits you]【请选择适合你的数字】: 1. Yes 是 2. No 否【Skip the following and go to E04 请跳过本表以下题目，直接从 E04 开始回答】 3. Don't know 不知道【Skip the following and go to E04 请跳过本表以下题目，直接从 E04 开始回答】 4. Not applicable 不适用【Skip the following and go to E04 请跳过本表以下题目，直接从 E04 开始回答】		
b. Where does he/she do migrant work? 他/她在哪里打工？ 【what place in which province 请填写什么省的什么地方】		
c. How frequently does he/she contact you 他/她跟你的联系情况【Please choose one that applies accordingly for h1, h2, h3, h4 and h5 请分别为 h1, h2, h3, h4, h5 选择合适的频率，填写相应的数字序号】:		
Frequency 频率： 1. Never 从不 2. Less than once a month 平均一个月不到一次 3. One to three times a month 一个月一到三次 4. Once a week 一周一次 5. At least twice a week 一周两次及以上	h1. Phone call 打电话	
	h2. Text message 发短信	
	h3. Letter 写信	
	h4. Online chatting 网上聊天	
	h5. Other 其他方式【Please specify 请注明：_____】	

【If your father or mother has ever done or is doing migrant work, please answer E04, E05, E06, E07 请所有父亲或者母亲曾经或者现在在外面打工的同学回答 E04，E05，E06，E07】

E04.What is the good thing about your father or mother doing migrant work 对于父亲或者母亲在外地打工，你觉得好的方面是：_____

E05. What is the bad side about it 你觉得不好的方面是: _____?

E06. Why do you think your father or mother did or is doing migrant work 你认为你父亲或者母亲为什么要去外地打工_____?

E07. Have you been to the place where your father or mother did migrant work 你去过你的父亲或母亲打工的地方吗？

1. Yes 去过【If yes, for how many times 如果去过，去过几次？_____次】 2. No 没有去过

【If your father or mother is currently doing migrant work, please answer E08 请所有父亲或者母亲现在在外地打工的同学回答 E08：】

E08. Do you want to go to the place (and live and study there) where your father or mother is doing migrant work 你想跟你的父亲或者母亲一起去他/她打工的地方（住在那里，在那里上学）吗？

1. Yes 想，because 因为_____
2. No 不想，because 因为_____
3. Don't know 不知道

F. Parenting Style 父母的教养方式

F01. The following statements describe how parents treat children. Please let me know how often your parents treat you in the way described in each statement. Please choose from "never", "sometimes" or "often".下面是一些父母对待孩子的方式。请告诉我你父母经常这样对待你吗? 请选择从不，有时或经常。

		从不 never	有时 sometimes	经常 often
a.	When you did something wrong, your parents would ask why you did it and discuss with you what you should do.你有做得不对的地方,你父母会问清楚原因,并与你讨论该怎样做才对	1	2	3
b.	Your parents encourage you to work hard.你父母鼓励你努力去做事情	1	2	3
c.	Your parents are nice to you when talking with you.你父母在跟你说话的时候很和气	1	2	3
d.	Your parents encourage you to think independently.你父母鼓励你独立思考问题	1	2	3
e.	Your parents explain to you why they want you to do something.当你父母要你做一件事情的时候,他们会给你讲为什么要这样做	1	2	3
f.	Your parents like to talk with you.你父母喜欢跟你说话、交谈	1	2	3
g.	Your parents easily notice it when you are in a bad mood or having a difficult time.你心情不好或遇到困难或麻烦时,你父母很容易就注意到	1	2	3
h.	You are always willing to tell your parents whatever difficult situation you find yourself in.无论遇到什么困难,你总愿意跟你父母说	1	2	3

i.	Your parents ask about your homework.你父母询问你家庭作业的情况	1	2	3
j.	Your parents ask about how you are doing in school.你父母询问你学校的情况	1	2	3
k.	Your parents know what you are doing during non-school days.你父母知道放假后你在做什么	1	2	3
l.	Your parents know who your friends are.你父母知道谁是你的朋友	1	2	3
m.	Your parents talk with you about topics that interest you.你父母与你一起谈论你感兴趣的话题	1	2	3
n.	Your parents compliment you.你父母表扬或感谢你	1	2	3
o.	Your parents criticize you.你父母批评你	1	2	3
p.	Your parents hug or pat you warmly.你父母对你表示亲热,如抱一抱,拍一拍	1	2	3
q.	Your parents deliberately ignore you when you do something that makes them angry.当你做一些让你父母生气的事情, 他们会故意不理你	1	2	3
r.	Your parents scold you when you do something that makes them angry.当你做一些让你父母生气的事情, 他们会责骂你	1	2	3
s.	Your parents spanked you when you do something wrong.你做错事情时父亲或母亲会打你	1	2	3
t.	Your parents actively contact and talk with your teachers.你父母主动和学校老师联系并交流意见	1	2	3

F02. How close is your relationship to your mother 你觉得你与母亲的关系亲近吗?
1.close 亲近 2.normal 一般 3.not close 不亲近 4.not applicable 不适用

F03. How close is your relationship to your father 你觉得你与父亲的关系亲近吗?
1.close 亲近 2.normal 一般 3.not close 不亲近 4.not applicable 不适用

F04. In the following aspects regarding your parents' attention paid to you, which you expect to be improved most_____, second most_____, and third most_____在下列父母对你的关注方面，你最期待进行改善的是_____,其次是_____,第三是_____

1. material living conditions 物质生活 2.study 学习帮助 3. emotions and feelings 情感关怀 4.social relations 社会交往
5.none 没有 6.other 其他【please specify 请注明：_____】

F05. Last month, how many times did you quarrel/fight with your parents and for what main reasons: 上个月，你和父母大概争吵了_____次，争吵的主要原因是：_____

G. Views and Feelings

G02. Would you completely disagree, disagree, agree or completely agree with each statement 对于下列说法，请选择你是完全不同意，不同意，同意，还是完全同意？

		Completely disagree 完全不同意	disagree 不同意	agree 同意	Completely agree 完全同意
a.	Sympathy is very important in my life 同情心在我的人生中很重要	1	2	3	4
b.	Honesty is very important in my life 诚实在我的人生中很重要	1	2	3	4
c.	Any means is justifiable to achieve an end 为了达到目的，可以不择手段	1	2	3	4
d.	Being cooperative is a necessary quality of a person 合作是个人必备的品质	1	2	3	4
e.	College education is necessary for me to do what I want to do in the future 为了做我将来想要做的事情，上大学是必要的	1	2	3	4
f.	I need to get good scores in school in order to get a good job when I grow up 为了长大找一份好的工作，我需要在学校得到好的分数	1	2	3	4
g.	Performing well in school is the best way to future success for me 学习好是我将来成功的最好方式	1	2	3	4

G06.Generally speaking, how happy do you feel you are 总的来说，你觉得自己有多幸福？

_____

1.very unhappy 非常不幸福　2.unhappy 不幸福　3.average 一般幸福　4.happy 幸福　5.very happy 非常幸福

G07. Please choose to what extent the following statements apply to you according to your own feelings. There is nothing right or wrong about your choice, as long as you choose the number that is most appropriate for you. Do not spend too much time on any item. While answering the questions, please think about your ordinary daily life instead of focus on a particular day.请根据你自己的真实感觉看看下面这些说法和你是否符合，然后进行选择。你的选择没有对错之分,只要你认为符合你的日常情况就好，所以不要在某一个问题上花太多的时间。在回答问题时，不要只想到某一天的情况，要想到平常生活的情况。

		Always 非常符合	Most of the time 比较符合	Sometimes 有时符合	Rarely 不太符合	Never 完全不符合
a.	I make new friends easily at school 我在学校容易交上新朋	1	2	3	4	5

	友。					
b.	I cannot find someone to talk to 我找不到人谈话。	1	2	3	4	5
c.	I like studying together with classmates 我喜欢和别的同学在一起学习。	1	2	3	4	5
d.	I have many friends 我有很多朋友。	1	2	3	4	5
e.	I feel lonely 我感到孤独。	1	2	3	4	5
f.	I can find one if I need friend 当我需要朋友，我可以找到一个。	1	2	3	4	5
g.	I think some students discriminate me 我觉得有些同学欺负/歧视我。	1	2	3	4	5
h.	When I need help, no one will be there for me 当我需要帮助时，没人会帮我。	1	2	3	4	5
i.	I am not interested in socializing with others 我对跟别人交往没有兴趣	1	2	3	4	5

G08. The following statements are some general descriptions about your life. Please read each statement carefully. Would you completely disagree, disagree, agree or completely agree with each statement? There is nothing right or wrong about your choice, as long as you choose the number that is most appropriate for you. Do not spend too much time on any item. While answering the questions, please think about your ordinary daily life instead of focus on a particular day.下列语句是对生活的一般性描述。请你仔细阅读,对于每一个说法,请选择你是完全不同意,不同意,同意,还是完全同意? 你的选择无对错之分,只要你认为符合你的日常情况就好，所以不要在某一个问题上花太多的时间。在回答问题时，不要只想到某一天的情况，要想到平常生活的情况。

		Completely disagree 完全不同意	Disagree 不同意	Agree 同意	Completely agree 完全同意
a.	I am a valuable person 我觉得我是有价值的人，至少不比别人差	1	2	3	4
b.	I think I have many good qualities 我觉得自己有许多好的品质	1	2	3	4
c.	I think I am a loser at the end 归根结底，我认为自己是一个失败者	1	2	3	4
d.	I can do things as well as most of the people 我能像大多数人一样把事情做好	1	2	3	4
e.	I don't think I have much to be proud of 我觉得自己值得自豪的地方不多	1	2	3	4
f.	I have a generally positive attitude toward myself 我对自己	1	2	3	4

	持肯定态度				
g.	Generally I am satisfied with myself 总的来说，我对自己是满意的	1	2	3	4
h.	I wish I could earn more respect for myself 我希望我能为自己赢得更多尊重	1	2	3	4
i.	I indeed often feel that I am useless 我确实时常感到自己毫无用处	1	2	3	4
j.	I often think that there is nothing good about me 我时常认为自己一无是处	1	2	3	4
k.	I think it is impossible for me to solve the problems I am facing currently 我认为自己根本没法解决目前面临的困难	1	2	3	4
l.	Sometimes I feel I have no choice in life 有时我觉得被生活所迫	1	2	3	4
m.	I have control over what happens to me 我对发生在我身上的事情有掌控能力	1	2	3	4
n.	I often find myself in a helpless situation 我在生活中经常遇到无助的事情	1	2	3	4
o.	I am confident with my future 我对自己的前途有信心	1	2	3	4

G09. During the past 30 days, how often do the following statements describe your feelings?
下面有一些对精神状态的描述，请根据你最近一个月内的情况填写，你多久：

		Almost everyday 几乎每天	Often 经常	Half of the time 一半时间	Sometimes 有一些时候是	Never 从不
a.	Feeling depressed, unexcited about anything 感到情绪沮丧，郁闷，做什么事情都不能振奋	1	2	3	4	5
b.	Feeling anxious 感到精神紧张	1	2	3	4	5
c.	Feeling uneasy, restless, finding it difficult to remain calm 感到坐卧不安、难以保持平静	1	2	3	4	5
d.	Feeling the future is hopeless 感到未来没有希望	1	2	3	4	5
e.	Finding it difficult to do anything 做任何事情都感到困难	1	2	3	4	5
f.	Feeling life is meaningless 认为生活没有意义	1	2	3	4	5

G10. Have you ever traveled abroad?你是否出国旅游过？_____ 1.Yes 是 2.No 否

G11. Have you ever traveled within China 你是否在国内旅游过？_____ 1.Yes 是 2.No 否

G13. What is the highest level of education you would like to achieve 你读书想要读到哪一级？
1.I want to quit now 现在就不想读了 2.middle school 初中 3.high school 高中 4.junior college 大专 5.college 大学 6.Graduate school 硕士/博士 7.It doesn't matter/I don't know 没所谓/不知道

G14. What kind of job you wish yourself to do in the future 你希望自己以后做什么样的工作？_____
G15. About future, what worries you most 对于未来，你最担心的是什么：_____
What you look forward to most 最期待的是: _____

G16. Now imagine that you are 20 years old, where will you be, what will you do and what kind of life will you be living? 下面，请你想象一下，你 20 岁的时候会在哪里，做什么，过着什么样的生活

G17. Now imagine that you are 30 years old, where will you be, what will you do and what kind of life will you be living? 你 30 岁的时候会在哪里，做什么，过着什么样的生活

C2. Family Questionnaire

Questionnaire No.问卷编号：____ Name 你的名字：_____ Class 你的班级：__

AA．家庭成员信息表

姓名 Name		
Relation to you 与你的关系： 1.father 父亲　2.mother 母亲 3.paternal grandfather 祖父　4.paternal grandmother 祖母 5.maternal grandfather 外祖父 6.maternal grandmother 外祖母 7.elder brother 哥哥　8.elder sister 姐姐 9.younger brother 弟弟　10.younger sister 妹妹　11.其他【请说明】		
Birth year 出生年份		
Birth month 出生月份		
Education 教育程度： 1.illiterate 不识字或识字很少 2.primary 小学 3.middle school 初中 4.academic high school 普通高中 5.vocational high school 职业高中/中专/技校 6.junior college 大学专科 7.college and above 大学本科及以上		
Marital status 婚姻状况： 1.single 未婚 2.married 已婚 3.cohabiting 同居 4.separated 分居未离婚 5.divorced 离婚 6.widowed 丧偶 7.deceased 已过世		
Current employment status 目前的就业状况：【please choose from the categories listed below this table 请从表下方的选项中进行选择】		
Is this person living together with you 是否和你住在一起？ 1.yes 是 2.no 否 3.deceased 已过世		
If not living together with you, what is the reason 如果不住在一起，原因是？ 1.He/she is doing migrant work 他/她在外地务工 2.He/she is living with father/mother somewhere else 他/她与父亲或母亲一起住在外地 3.He/she is married 他/她已经结婚分家过 4.He/she is in school somewhere else 他/她在外地读书 5.He/she has joined the army 他/她参军 6.He/she lives independently 他/她自己单过 7.He/she stays with other children 他/她与其他子女住一起 8.He/she stays in elderly care center 他/她住在敬老院		

9.other 其他【请说明】		

Employment status 就业状况：1.full-time farmer 全业务农 2.part-time farmer 兼业务农 3.full-time job 全日制工作 4.part-time job 非全日制工作 5.temporary job 临时性工作 6.helping with family business 在自家生意中帮忙 7.in school or army service 上学、服兵役 8.never worked and looking for job 从未工作过正在找工作 9.unemployed and looking for job 失去工作后正在找工作 10.on a vocation 休长假 11.retired 离休/退休 12.staying at home doing housework 在家料理家务 13.disabled 残疾或身体状况不佳 14.other 其他（请注明） 90.not applicable 不适用（deceased 已过世）91.not applicable 不适用（underage 年幼）

EE. Parents' occupation and family economic situation 父母职业及家庭经济状况

		Father 父亲	Mother 母亲
a.	What is his/her occupation?他/她现在的职业是什么？【比如建筑工人、司机、医生、公务员、餐馆服务员、电工、服装厂工人、经理、工厂老板，等等】		
b.	What is his/her monthly income?他/她的平均月收入是多少？	_____RMB 元	_____RMB 元
c.	Has he/she done migrant work?他/她是否外出工作过？	1.yes 是 2.no 否【please skip to question n 请跳至本表的 n 题】	1.yes 是 2.no 否【please skip to question n 请跳至本表的 n 题】
d.	When did he/she first started doing migrant work?他/她第一次外出工作是什么时候？	____Year 年___Month 月	____Year 年___Month 月
e.	When was his/her most recent migrant work?他/她最近一次外出工作是什么时候？	____Year 年___Month 月	____Year 年___Month 月
f.	How old were you when he/she started doing migrant work?你几岁开始他/她就已经开始外出工作了？	_____Age 岁	_____Age 岁
g.	For how many years in total he/she has done migrant work?他/她出去打工的时	_____Years 年	_____Years 年

	间加起来大概有多少年？		
h.	How often did he/she go home every year when he/she was migrant worker? 他/她在外打工的年份里，平均多久回家一次？	1.once every few months 不到半年一次 2.once half a year 半年一次 3.once a year 一年一次 4.once a year and a half 一年半一次 5.once every two years 两年一次 6.once more than two years 两年以上时间一次 7.other 其他【please specify 请说明:_____】	1.once every few months 不到半年一次 2.once half a year 半年一次 3.once a year 一年一次 4.once a year and a half 一年半一次 5.once every two years 两年一次 6.once more than two years 两年以上时间一次 7.other 其他【please specify 请说明:_____】
i.	For how long he/she stayed at home on average per year when he/she was migrant worker? 他/她在外打工的年份里，平均能在家呆多长时间？	____Months 月___Days 天	____Months 月___Days 天
j.	In the past 12 months, how frequently has he/she remitted money back? 过去 12 个月里，他/她有以汇款或其他方式（自己带回，或托人带回）给过家里钱吗？频率如何？	1.至少一周一次 2.一个月 1 至 3 次 3.一年几次 4.一年一次 5.几乎没有 6.过去 12 个月在家	1.至少一周一次 2.一个月 1 至 3 次 3.一年几次 4.一年一次 5.几乎没有 6.过去 12 个月在家
k.	What is the total amount of remittances he/she sent back home last year?去年一年的他/她的汇款总额大约是多少？	_____RMB 元	_____RMB 元
l.	What are the uses of these remittances from father or mother?父亲或母亲的这些汇款通常的用途是什么？ 【可以多选】	1.Paying debts 还债 2.children's education 子女上学 3.Medical expenses 看病 4.Purchase of consumer electronics or furniture 买大件日用品 5. Building houses, buying apartment or decorating house 盖房子、买房子或装修	1.Paying debts 还债 2.children's education 子女上学 3.Medical expenses 看病 4.Purchase of consumer electronics or furniture 买大件日用品 5. Building houses, buying apartment or decorating house 盖房子、买房子或装修

		6.investing in farm or factory 投资农场或工厂 7.savings 存款积蓄 8.daily life expenses 日常生活开支 9.other 其他【please specify 请说明：_____】	6.investing in farm or factory 投资农场或工厂 7.savings 存款积蓄 8.daily life expenses 日常生活开支 9.other 其他【please specify 请说明：_____】
m.	How many percentages of the remittances from father or mother are spent on you?父亲或母亲的汇款中多大比例是用在你身上？	_____%	_____%
n.	What is the annual income of your family in 2011? [Including wage, bonus, subsidies, income from aquaculture, cash crop, business, rent, interest, pension, insurance, minimum living standard, donations etc.]2011 年全年你的家庭收入情况？【包括工资收入、各种奖金和补贴、养殖收入、种植收入、经商/做生意/个体经营收入、出租房屋或土地的租金收入、利息、分红、保险金、退休金、最低生活保障金、馈赠等】 Total income 总收入：_____RMB 元		
o.	What are the total expenses of your family in 2011? [Including living expenses, medical expenditure, house maintenance fees, rent, education, insurance, purchase of consumer electronics or furniture, gifting etc.]2011 年全年你家的家庭支出情况？【包括生活开支、看病、修建修缮房屋、租房支出、教育支出、保险费用、购买大件商品支出、人情开支等】 Total expenses 总支出：_____ RMB 元， including 其中【Note 注意：the total of the following three items are not necessarily equal to the total expenses 这三项支出加起来并不等于总支出】: Food 食物消费：____RMB 元 Medical insurance/expenses 医疗支出/保险：___RMB 元 Education expenses 教育支出：_____RMB 元		

C3. Caregiver Questionnaire

Section One. Basic Information 一．个人基本情况

Q01.You are child's 您是孩子的_____
1.mother 母亲　2.father 父亲　3.paternal grandmother 祖母（父亲的母亲）　4.paternal grandfather 祖父（父亲的父亲）
5.maternal grandmother 外祖母（母亲的母亲）6.maternal grandfather 外祖父（母亲的父亲）7.elder sister 姐姐　8.elder brother 哥哥
9.aunts 阿姨/婶婶　10.uncles 叔叔/伯伯　11.other 其他【Please specify your relationship to child 请注明您与孩子的关系:_____】

【If you are child's mother or father, please skip questions 02-06 and start from question 07 如果您是孩子的母亲或父亲，请跳过题 02-题 06，从题 07 开始回答】
Q02.Birth year and birth month 出生年月[Please fill in your year and month of birth in western calendar first, if you are not sure about or if you do not remember it, please fill in your lunar calendar birth year and month 请优先按照公历填写，假如不确定或不记得公历生日，则请填写农历/阴历]
_____ Year 年 _____ Month 月 [western calendar 公历/阳历]
_____ Year 年_____ Month 月 [lunar calendar 农历/阴历]

Q03. Your highest educational achievement 您的最高教育程度是_____
1.no schooling 没上过学 2.primary 小学 3.middle school 初中 4.vocational high school 中专/职高 5.academic high school 高中 6.junior college 大专 7.college and above 大学及以上

Q04.Your party membership 您的政治面貌是_____
1.Chinese communist party member 共产党员 2.Chinese Communist Youth Leaguer 共青团员 3.Non-CCP party member 民主党派 4.Ordinary people 群众

Q05.Your marital status 您的婚姻状况是_____
1.single 未婚 2.married 已婚有配偶 3.cohabiting 同居 4.separated 分居　5.divorced 离婚 6.widowed 丧偶

Q06.Your current employment status 您目前的就业状况是_____
1.full-time farmer 全业务农 2.part-time farmer 兼业务农 3.full-time job 全日制工作 4.part-time job 非全日制工作 5.temporary job 临时性工作 6.helping with family business 在自家生意中帮忙 7.in school or army service 上学、服兵役 8.never worked and looking for job 从未工作过正在找工作 9.unemployed and looking for job 失去工作后正在找工作 10.on a vocation 休长假 11.retired 离休/退休 12.staying at home doing housework 在家料理家务 13.disabled 残疾或身体状况不佳 14.other 其他（请注明）

Section Four. About child 四. 孩子的情况

Q16. Please indicate if the following applies to you or not? 1 means “yes”, 2 means “no”对下列问题，请回答是或否，1 表示“是”，2 表示“否”：

		Yes 是	No 否
a.	Do you set a time limit regarding when your child should be home 您是否规定孩子最晚回家的时间?	1	2
b.	Do you have rules regarding your child hanging out with friends or classmates?您是否设定孩子跟朋友或同学见面聚会应该遵循的规矩、原则?	1	2
c.	Do you set rules for the child regarding how much time he/she can spend on watching TV and what kinds of programs he/she can watch 您是否设定孩子看电视的时间和节目类型应该遵循的规矩、原则?	1	2
d.	Do you have rules regarding time limit and content of internet surfing for your child 您是否设定孩子上网的时间和内容应该遵循的规矩、原则?	1	2
e.	Do you explicitly tell your child that smoking or drinking is not allowed 您是否明确告诉孩子不可以吸烟或喝酒?	1	2
f.	Have you ever physically punished your child to discipline him/her 您是否为了管教孩子而打过他/她？	1	2

Q17.In this year, how often do you discuss with your child about the following matters, 1 means “never”, and 6 means “everyday”请问今年以来您是否经常和孩子谈论以下事情，1 表示“从不”，6 表示“每天”。

		never 从不	A few times a year 一年几次	Once to twice every month 每月一到两次	About once a week 大概一星期一次	More than once a week 一星期超过一次	Everyday 每天
a.	Talking about what happened in school with the child 和孩子谈论学校里的活动或事情	1	2	3	4	5	6
b.	Discussing the child’s study plan or objective with him or her 和孩子讨论他/她的学习计划或目标	1	2	3	4	5	6
c.	Asking the child how he or she is doing in homework 询问孩子完成作业的情况	1	2	3	4	5	6
d.	Asking the child how he or she fares in exams 询问孩子考试的情况	1	2	3	4	5	6
e.	Checking how often the child plays games and what kinds of games he/she plays 询问孩子打游戏的情况	1	2	3	4	5	6

f.	Checking how much time the child spends and what he/she does on the internet 询问孩子上网的情况	1	2	3	4	5	6
g.	Contacting the teacher to check how the child performs academically and how he or she behaves in school 和老师联系了解孩子的学习及其他表现	1	2	3	4	5	6
h.	Checking the child's physical health 询问孩子的身体健康状况	1	2	3	4	5	6
i.	Checking how the child behaves (for example, abide by the rules, smoke, drink alcohol)询问孩子的其他行为表现（如遵规守纪、吸烟、喝酒）	1	2	3	4	5	6
j.	Is concerned about the child's emotional flows 询问孩子的情绪变化、心情（烦恼、开心等等）	1	2	3	4	5	6
k.	Talking with the child about his/her relationship with friends 跟孩子谈论他/她跟同学、朋友的关系	1	2	3	4	5	6
l	Encouraging or complimenting the child 鼓励或表扬孩子	1	2	3	4	5	6
m.	Talking about recent news with the child 跟孩子谈论最近的新闻	1	2	3	4	5	6
n.	Talking with the child about topics interest him/her 跟孩子谈论他/她感兴趣的话题	1	2	3	4	5	6

Section Five. About child's parents 五.孩子父母的情况

Q24.How has child's parents' labor migration influenced family economic situation?您认为孩子的父母去外地工作对家庭的经济状况有什么影响？

1.improved significantly 很大提高 2.improved to some degree 有所提高 3.no effect 没有变化 4.deteriorated to some degree 稍有降低 5.deteriorated significantly 降低很多

Q25.What are the good sides of parental labor migration for child?父母去外地工作对孩子的主要好处是什么？

_____

Q26.What are the bad sides of parental labor migration for child?父母去外地工作对孩子的主要坏处是什么？

_____

Q27.Generally speaking, what is the impact of parental labor migration on child?总的来说，孩子的父母去外地工作对孩子的影响如何？

1.overall beneficial 总的来说，对孩子有利

2.no effect 几乎没有改变

3.overall harmful 总的来说，对孩子有害

Q28.What are the biggest challenges posed by child's parents' labor migration for family 您认为孩子的父母外出工作给家庭造成的最大困难是什么？【可以多选】

1.involvement in child's study 辅导孩子的学习 2.supervising child 监督管教孩子 3.economic resources 经济收入问题 4.housework 家务劳动 5.farm work 农活 6.other 其他，please specify 请说明：_____

C4. Teacher Questionnaire

Q01. Name of student 学生名字：_____

Q02. Please indicate whether you completely disagree, disagree, neither disagree nor agree, agree, or completely agree with the following statements about the student 请评价该学生的以下表现：

		Completely disagree 十分不同意	Disagree 不同意	Neutral 中立	Agree 同意	Completely agree 十分同意
a.	This student is optimistic 这个学生生性乐观。	1	2	3	4	5
b.	This student is not self-confident 这个学生对自己没有自信心。	1	2	3	4	5
c.	This student is curious and adventurous 这个学生好奇且有探索精神，喜欢新的经历。	1	2	3	4	5
d.	This student thinks before taking action 这个学生遇事情会想好了再做，不冲动。	1	2	3	4	5
e.	This student is methodical 这个学生做事仔细有条理。	1	2	3	4	5
f.	This student likes to arrange his/her things in an orderly way 这个学生喜欢把自己的物品摆放整齐。	1	2	3	4	5
g.	This student often does what teachers have assigned to him or her in a responsible way 这个学生对老师交代的事情会认真做好。	1	2	3	4	5
h.	This student can easily overcome impatience 这个学生能够很容易地克服烦躁。	1	2	3	4	5
i.	This student tries to do things independently 这个学生尽量自己独立做事。	1	2	3	4	5
j.	This student has good studying attitudes 这个学生学习态度端正。					
k.	This student studies very hard 这个学生学习很努力。	1	2	3	4	5

l.	This student concentrates on what he/she is doing 这个学生做事时注意力集中。	1	2	3	4	5
m.	This student is careful in doing schoolwork 这个学生做题认真。	1	2	3	4	5
n.	This student obeys the rules 这个学生遵规守纪。	1	2	3	4	5
o.	This student always perseveres in doing things 这个学生做事情有恒心。	1	2	3	4	5
p.	This student is tolerant of mistakes made by others in games or other activities 这个学生在活动中能容忍同龄人的错误。	1	2	3	4	5
q.	This student likes to help others 这个学生喜欢帮助他人。	1	2	3	4	5
r.	This student is very popular among other peer students 这个学生很受同学欢迎。	1	2	3	4	5
s.	This student is very introvert and does not like to socialize with others 这个学生很内向，不爱和人打交道。	1	2	3	4	5
t.	This student is always unhappy 这个学生总是闷闷不乐的。	1	2	3	4	5

C5. Adolescent Questionnaire (2st round)

Questionnaire No.问卷编号: _____ Name 名字: _____ Class 班级: _____

Q01. Since this semester began, your primary caregivers are 从本学期开始到现在，你的主要照顾人是【Please choose at most two numbers 请最多选择两项】
1.mother 母亲　2.father 父亲　3.paternal grandparents 祖父母（爷爷奶奶）　4.maternal grandparents 外祖父母（外公外婆）
5.uncles, aunts 伯父伯母/叔叔婶婶/姑父姑妈/舅舅舅妈/姨父姨妈　6.other 其他【please specify 请注明：_____】
[Note 说明：primary caregiver refers to the person who lives together with you and takes care of your daily life 主要照顾人指和你居住生活在一起，照顾你饮食起居的人。If your mother is doing migrant work outside Tongcheng county and she does not live together with you, then she shall not be counted as your primary caregiver 假如你母亲在通城以外的某个地方打工，没有和你居住生活在一起，则不能算是你的主要照顾人。]

Q02. Your age 你今年_____岁，you have in total 你一共有_____个 siblings 兄弟姐妹，among whom 其中有_____个 elder brothers 哥哥，_____个 elder sisters 姐姐，_____个 younger brothers 弟弟，_____个 younger sisters 妹妹
[Note 说明：Siblings refer to your biological brothers and sisters, half-brothers and half-sisters, excluding cousins. Please fill in appropriate number. If you do not have any sibling, please fill in "0"此处兄弟姐妹指同父同母，或同父异母，或同母异父的兄弟姐妹，不包括堂（表）兄弟姐妹。请在横线上填写相应数字，如果没有，则填"0"。]

Q03. Your father's age 你父亲今年_____岁【If your father has passed away, how old were you when that happened 如果你父亲已经去世，他去世时，你_____岁】

Q04. Your father's marital status 你父亲的婚姻状态是
1.married 已婚
2.divorced 离婚【how old were you when your parents divorced 你父母离婚时，你_____岁】
3.remarried 再婚【how old were you when your parents divorced 你父亲和母亲离婚时，你____岁；how old were you when your father remarried 你父亲和继母结婚时，你____岁】
4.widowed 丧偶　5.deceased 已经去世

Q05. Your father's highest educational attainment 你父亲念完的最高年级【If you do not know, please try your best to give the best estimate 如果你不知道，请你尽最大的努力给出最好的估计】是

0.no schooling 没有念过书	1.Grade one 小学一年级	2.Grade two 小学二年级	3.Grade three 小学三年级
4.Grade four 小学四年级	5.Grade five 小学五年级	6.Grade six 小学六年级	7.Grade seven 初中一年级
8.Grade eight 初中二年级	9.Grade nine 初中三年级	10.Grade ten 高中一年级	11.Grade eleven 高中二年级
12.Grade twelve 高中三年级	13.Junior college graduate 大学专科毕业	14.College graduate and above 大学本科毕业及以上	

Q06. What does your father do 你父亲主要从事何种职业【If you do not know, please try your best to give the best estimate 如果你不知道，请你尽最大的努力给出最好的估计】
1. Manual labor 体力劳动者（例如：清洁工，矿工，建筑工人，运输工人，街头小贩，快递员）
2. Skilled worker 技术工人（例如：砖匠，木匠，电工，司机，修理工，裁缝，厨师）
3. Service personnel 商业服务业人员（例如：服务员，营业员，美容美发人员，售票员，保安）
4. Office employee 一般文员/办公室职员/办事人员（例如：秘书，打字员，银行职员，接待员）
5. Foreperson 工头或领班
6. Middle manager 办公室中层管理人员（有 1-10 个下属）
7. Leader or senior managers 单位领导或高级管理人员（有 10 个以上下属）
8. Professionals 专业技术人员（例如：医生，教师，律师，会计，工程师，程序员）
9. Individual industrial and commercial household 个体工商户（自己或家庭经营，没有雇佣员工）
10. Small-scale private enterprise owner 小私营业主/企业雇主（有 1-10 个员工）
11. Large-scale private enterprise owner 大私营业主/企业雇主（有 10 个以上员工）
12. Farmer, or forestry, and fishery workers 农民或林业、渔业生产人员
13. Army man/Policeman 军/警人员
14. Disabled 身体残疾而无法工作 15. Not applicable, deceased 不适用，已经去世

Q07. Your father's monthly income 你父亲一个月的收入（including basic salary, extra-hours payment, bonus 包括基本工资，加班工资，奖金）大概是

1. 0-1000 元	2. 1001-1500 元	3. 1501-2000 元	4. 2001-2500 元
5. 2501-3000 元	6. 3001-3500 元	7. 3501-4000 元	8. 4001-5000 元
9. 5001-6000 元	10. 6000 元以上		

11.not applicable 不适用【passed away 已去世；or divorced with your mother and you live with your mother 或者他已与你母亲离婚，而你跟随母亲生活】
Q08. Your mother's age 你母亲今年_____岁【If your mother has passed away, how old were you when that happened 如果你母亲已经去世，她去世时，你_____岁】
Q09. Your mother's marital status 你母亲的婚姻状态是
1.married 已婚
2.divorced 离婚【how old were you when your parents divorced 你父母离婚时，你_____岁】
3.remarried 再婚【how old were you when your parents divorced 你母亲和父亲离婚时，你____岁；how old were you when your mother remarried 你母亲和继父结婚时，你____岁】
4.widowed 丧偶 5.deceased 已经去世

Q10. Your mother's highest educational attainment 你母亲念完的最高年级【If you do not know, please try your best to give the best estimate 如果你不知道，请你尽最大的努力给出最好的估计】是

0.no schooling 没有念过书	1.Grade one 小学一年级	2.Grade two 小学二年级	3.Grade three 小学三年级
4.Grade four 小学四年级	5.Grade five 小学五年级	6.Grade six 小学六年级	7.Grade seven 初中一年级
8.Grade eight 初中二年级	9.Grade nine 初中三年级	10.Grade ten 高中一年级	11.Grade eleven 高中二年级
12.Grade twelve 高中三年级	13.Junior college graduate 大学专科	14.College graduate and above 大学本科及以上	

Q11. What does your mother do 你母亲主要从事何种职业【If you do not know, please try your best to give the best estimate 如果你不知道，请你尽最大的努力给出最好的估计】
1. Manual labor 体力劳动者（例如：清洁工，矿工，建筑工人，运输工人，街头小贩，快递员）
2. Skilled worker 技术工人（例如：砖匠，木匠，电工，司机，修理工，裁缝，厨师）
3. Service personnel 商业服务业人员（例如：服务员，营业员，美容美发人员，售票员，保安）
4. Office employee 一般文员/办公室职员/办事人员（例如：秘书，打字员，银行职员，接待员）
5. Foreperson 工头或领班
6. Middle manager 办公室中层管理人员（有 1-10 个下属）
7. Leader or senior managers 单位领导或高级管理人员（有 10 个以上下属）
8. Professionals 专业技术人员（例如：医生，教师，律师，会计，工程师，程序员）
9. Individual industrial and commercial household 个体工商户（自己或家庭经营，没有雇佣员工）
10. Small-scale private enterprise owner 小私营业主/企业雇主（有 1-10 个员工）
11. Large-scale private enterprise owner 大私营业主/企业雇主（有 10 个以上员工）
12. Farmer, or forestry and fishery workers 农民或林业、渔业生产人员
13. Army man/Policeman 军/警人员
14. Disabled 身体残疾而无法工作 15. Not applicable, deceased 不适用，已经去世

Q12. Your mother's monthly income 你母亲一个月的收入（including basic salary, extra-hours payment, bonus 包括基本工资，加班工资，奖金）大概是

1. 0-1000 元	2. 1001-1500 元	3. 1501-2000 元	4. 2001-2500 元
5. 2501-3000 元	6. 3001-3500 元	7. 3501-4000 元	8. 4001-5000 元
9. 5001-6000 元	10. 6000 元以上		

11.not applicable 不适用【passed away 已去世；or divorced with your father and you live with your father 或者她已与你父亲离婚，而你跟随父亲生活】

<u>If your primary caregiver is not your parent, please answer Q13-Q15 如果你的主要照顾人不是父母，请回答 Q13-Q15</u>

Q13. Your primary caregiver's age 你的主要照顾人今年_____岁，for how many years he/she has taken care of you 他/她一共照顾了你_____年

Q14. Your primary caregiver's highest educational attainment 你主要照顾人念完的最高年级【If you do not know, please try your best to give the best estimate 如果你不知道，请你尽最大的努力给出最好的估计】是

0.no schooling 没有念过书	1.Grade one 小学一年级	2.Grade two 小学二年级	3.Grade three 小学三年级
4.Grade four 小学四年级	5.Grade five 小学五年级	6.Grade six 小学六年级	7.Grade seven 初中一年级
8.Grade eight 初中二年级	9.Grade nine 初中三年级	10.Grade ten 高中一年级	11.Grade eleven 高中二年级
12.Grade twelve 高中三年级	13.Junior college graduate 大学专科	14.College graduate and above 大学本科及以上	

Q15. What does you primary caregiver do 你主要照顾人主要从事何种职业【If you do not know, please try your best to give the best estimate 如果你不知道，请你尽最大的努力给出最好的估计】

1. Manual labor 体力劳动者（例如：清洁工，矿工，建筑工人，运输工人，街头小贩，快递员）
2. Skilled worker 技术工人（例如：砖匠，木匠，电工，司机，修理工，裁缝，厨师）
3. Service personnel 商业服务业人员（例如：服务员，营业员，美容美发人员，售票员，保安）
4. Office employee 一般文员/办公室职员/办事人员（例如：秘书，打字员，银行职员，接待员）
5. Foreperson 工头或领班
6. Middle manager 办公室中层管理人员（有 1-10 个下属）
7. Leader or senior managers 单位领导或高级管理人员（有 10 个以上下属）
8. Professionals 专业技术人员（例如：医生，教师，律师，会计，工程师，程序员）
9. Individual industrial and commercial household 个体工商户（自己或家庭经营，没有雇佣员工）
10. Small-scale private enterprise owner 小私营业主/企业雇主（有 1-10 个员工）
11. Large-scale private enterprise owner 大私营业主/企业雇主（有 10 个以上员工）
12. Farmer, or forestry, and fishery workers 农民或林业、渔业生产人员
13. Army man/Policeman 军/警人员 14. Disabled 身体残疾而无法工作

Q16. The following question asks you about the history of your living together with parents and being separated from them. Please read the example first and then answer the question accordingly 下面这题询问你和爸爸妈妈共同或分开居住生活的经历，请先阅读下面的例子，再根据自己的情况回答。

【example 举例】Yu Li (14 years old):余丽（刚好 14 周岁）的生活经历如下：when she was 0-5 years old, her parents were at home for the first half of the time and were away doing migrant work for the second half of the time; when she was 6-12 years old, Yu Li did 2.5 years of primary school in the place whether her parents were working and then she returned to Tongcheng for the rest 4.5 years while her parents continued doing migrant work; since she was 13 years old, her mother returned home while her father continued doing migrant work. So here is how Yu Li filled in the table 0 岁-5 周岁以前，前一半时间爸爸妈妈都在家，后一半时间爸爸妈妈都外出务工；6 岁-12 周岁以前，前面两年半余丽跟随爸爸妈妈在外地念书，后面四年半，余丽返回通城，爸爸妈妈继续在外务工；13 岁-现在，余丽妈妈回家，爸爸继续在外务工。那么，余丽根据自己的情况填写下表：

	Father 父亲	Mother 母亲
0-5 years old 0 岁—5 周岁以前	Staying together 和你一起居住生活 2 years 年 6 months 个月 Living apart 和你分开居住生活 2 years 年 6 months 个月	Staying together 和你一起居住生活 2 years 年 6 months 个月 Living apart 和你分开居住生活 2 years 年 6 months 个月
6-12 years old 6 岁—12 周岁以前	Staying together 和你一起居住生活 2 years 年 6 months 个月 Living apart 和你分开居住生活 4 years 年 6 months 个月	Staying together 和你一起居住生活 2 years 年 6 months 个月 Living apart 和你分开居住生活 4 years 年 6 months 个月
Age 13- now 13 岁--现在	Staying together 和你一起居住生活 0 years 年 0 months 个月 Living apart 和你分开居住生活 2 years 年 0 months 个月	Staying together 和你一起居住生活 2 years 年 0 months 个月 Living apart 和你分开居住生活 0 years 年 0 months 个月

Now, please fill in the following table according to your life experience. If you are not sure about it, please try your best to give the best estimate 下面，请你根据你自己的生活经历填写下表，如果你不完全确定，也请你尽自己最大的努力给出最准确的估计。

	Father 父亲	Mother 母亲
0-5 years old 0 岁—5 周岁以前	Staying together 和你一起居住生活 years 年 months 个月 Living apart 和你分开居住生活 years 年 months 个月	Staying together 和你一起居住生活 years 年 months 个月 Living apart 和你分开居住生活 years 年 months 个月
6-12 years old 6 岁—12 周岁以前	Staying together 和你一起居住生活 years 年 months 个月 Living apart 和你分开居住生活 years 年 months 个月	Staying together 和你一起居住生活 years 年 months 个月 Living apart 和你分开居住生活 years 年 months 个月
Age 13-now 13 岁--现在	Staying together 和你一起居住生活 years 年 months 个月 Living apart 和你分开居住生活 years 年 months 个月	Staying together 和你一起居住生活 years 年 months 个月 Living apart 和你分开居住生活 years 年 months 个月

Q17. Have you ever studied in the place where your parents did migrant work 你是否跟随父母在外地念过书？

1.No, I have always been in school at my hometown 否，我一直在家乡念书

2.Yes 是【so how many years of primary school and middle school respectively 那么，你一共在外地念过_____年小学，_____年初中】

3.other 其他情况, for example 例如：_____

Q18. What changes in your living standard (diet, clothing) are there after your parents started doing migrant work 父母亲外出务工之后，你感觉你的生活水平（比如饮食，衣着等方面）有什么变化？

1.greatly declined 降低很多　2.somewhat declined 稍有降低　3.no change 没有变化

4.somewhat increased 有所提高　5.greatly increased 很大提高　6.my parents have never done migrant work 我父母亲都从未外出务工过

Q19. What changes in your educational resources (private tuition lessons, study materials, or stationeries) are there after your parents started doing migrant work 父母亲外出务工之后，你感觉用于你学习方面的资源（比如参加课外辅导班，购买学习资料，文具等等）有什么变化？

1.greatly declined 降低很多　2.somewhat declined 稍有降低　3.no change 没有变化

4.somewhat increased 有所提高　5.greatly increased 很大提高　6.my parents have never done migrant work 我父母亲都从未外出务工过